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LECTURES

ON THE

THEORY AND PRACTICE OF MIDWIFERY,

DELIVERED AT GUY'S HOSPITAL BY

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LECTURE XXIV.

Of the Use of the Forceps and Tractor, or Lever.

VERY dreadful are the evils resulting from the employment of obstetric instruments, and very dreadful, too, are those evils which result from neglecting their administration, when really required. All obstetric instruments are an evil; every additional obstetric instrument is, I think, an additional evil. He is an able accoucheur who contrives a serviceable instrument; but he is an accoucheur still abler who teaches us how to dispense with it. Though instruments are of great value in individual cases, in the sum of their effects upon the sex, they have, perhaps, proved rather a curse than a blessing. Happy might it have been for women generally, and still happier for their offspring, if instruments had never been invented. All this may be true, and yet it may be equally true that among many cases there are a few, in unhealthy districts especially, in which, to use the obstetric instrument, is a smaller evil than to reject its use, and in such instances it becomes our duty to operate.

Good sense has invented and varied some obstetric instruments; whim, innovation, and sciolism—not to add the spirit of professional adventure—have contrived still more. It was remarked, by one of the ancient philosophers, that time was his estate. Considering it, as I do, as one of our most valuable possessions, you will, I trust, excuse me for not wasting any part of it by entering into barren contentions about the defects and excellencies of these various contrivances. To those who are fond of talking and disputing on obstetric subjects, these instruments may furnish an amusing and inexhaustible subject on which to exercise their garrulous eloquence; but those who wish to give themselves more to action than disputation, will do well, I conceive, to confine their attention to the consideration of those instruments which are best approved by practice. *Ars longa vita brevis.* The solid part of the profession contains more than enough to fill the very small compass of the longest life.

Of instruments contrived to assist the birth in laborious labours, the most valuable are—the tractor, the forceps, the perforator, the crochet, the blunt hook, and the craniotomy forceps—specimens of all which I here deposit on the table before you. Of these instruments, the latter are designed to facilitate the birth of the fœtus, by reducing its bulk, and may be called the embryotomic; while the former, or embryospastic instruments, as they may be denominated, are contrived to abstract the fœtus without injury either to the mother or her offspring. And, first, of the embryospastic instruments, the forceps long and short, and the tractor, or lever.

When called to a case of instrumental delivery, you will usually find the system in one of three conditions—collapsed, excited, or in a state of vigour and comparative calm. When the patient is excited, take away, on an average, 16 or 20 ounces of blood; nor is this practice improper, when the excitement is not conspicuous, but the lancet must not be used; if collapse have occurred in a high degree, contusion, or laceration, are probable here, and, before you operate, an unfavourable prognostic may be given. The heat, pulse, tongue, and countenance are the principal sources from which, in these cases, our judgment is derived.

When called to a case of instrumental delivery, before you employ the embryospastics, let the rectum be cleared, if loaded; and, if practicable and safe, let the bladder be evacuated by the natural efforts, or the catheter; the urine, however, should not be drawn, unless this may be accomplished without violence. Again, if the os uteri

be no larger than a crown piece, instruments will probably tear it; if the vagina, or genital fissure, be rigid, laceration, contusion, and slough may be expected; if the parts are inflamed, swelled, and irritable, instruments are unsafe—the softer parts ought to be relaxed most completely, and the os uteri ought to be wide open, and the inflammation and irritation ought to be subdued by bleeding, before embryospastic instruments are employed. Before you use the embryospastic instruments, obtain a just notion of the position of the womb, the ovum, and the head of the fœtus. From these casts you may readily acquire a knowledge of the position of the uterus, forming a large tumour, which occupies about two-thirds of the abdominal cavity, the fundus lying forth above, beyond the ensiform cartilage, and the mouth and neck resting on the brim of the pelvis below, so as to be directed towards the inferior extremity of the sacrum. In or near the fundus of the womb it is, (above therefore, and beyond, the ensiform cartilage,) that the loins and lower limbs are deposited, and when the os uteri is open, in the pelvis it is that we find the cranium various in its positions; at the brim, cavity, or outlet, under presentations of the face, vertex, or forehead, with a situation of the face to the front, the side, or the back of the pelvis. The position of the head is ascertained by examination; and the rules of examination have been already given at large. Before you have recourse to embryospastic instruments, it is desirable, though perhaps not peremptorily necessary, that you should have a just notion respecting the nature of the obstruction, arising usually from one of three causes—rigidity, want of space, and unfavourable position of the head. Examination is the mean of detecting them. When on the different varieties of laborious labours, I shall enter with more detail into the consideration of these difficulties, and our means of ascertaining them.

By different operators, women, when the embryospastic instruments are employed, are placed variously, the sedentary and recumbent postures, or the position, on the right or left side, being the principal. According to the habits of the accoucheur, one or other of these positions may, in any given case, deserve the preference; for myself, I am accustomed to put the patient in the position of this fœtus; on the left side I mean, and close upon the edge of the bed, with the shoulders forward, the loins posteriorly, and the abdomen a little below; and if I think a bearing point desirable, I place the feet against the post of the bed; directing the nurse, usually large, round, soft, and heavy, to sit on the bed, with her back resting against the lumbar-hollow, as here demonstrated, if I wish to prevent the sudden starts of the patient. In using the tractor, it is more especially necessary that the pelvis should be securely fixed. When the posture of the patient is arranged, you may then place yourselves at the bed-side, in any way most commodious; kneeling on a pillow, or sitting on a low chair, and it may sometimes be convenient to change from one position to the other, as the operation advances. But to proceed.

Of the Long Forceps.

The long forceps, of which I here exhibit a specimen, from end to end, measures about 14 inches; and, when properly applied at the brim of the pelvis, it lies obliquely, with its point directed towards the navel, and its shank upon the perineum. By a distinguished surgeon of the last century, Levret, I mean, the long forceps were laterally incurvated, as in the specimen here exhibited; so that by this curvature, as you may see, on placing the forceps in the pelvis, the handles are thrown forward from the sacrum, and the perineum is rendered more secure. Forceps, both straight and incurvated, I have repeatedly used; and after some experience of both, I decidedly prefer the straight. Lateral curvature may protect the perineum somewhat, but its most certain security is derived from the prudence and gentleness of the accoucheur. The blades of these long forceps, in the method of using them hereafter recommended, may be applied to different parts of the head; as, however, they are more generally laid over the forehead and occiput; it is to these regions of the cranium, that they are, with the greatest nicety, adapted; and examining the models on the table, you will perceive that they conform to the cranium with great exactitude. Unless the blades be elastic, however, absolute adaptation can, I conceive, never be obtained; for while the form of the instrument remains unchanged, that of the head itself varies. Smellie's lock, here shown, is decidedly the best; the lock should be loose, so as to admit a conjunction of the blades, although they are not brought into exact apposition with each other; for, in applying them to the head, this apposition cannot always be obtained. The instrument should be strong, and free from points or edges. Cleanliness renders it desirable that the forceps be not coated with leather.

I do not like to see an elegant pair of forceps. Let the instrument look like what is, a formidable weapon. *Arte, non vi*, may be usefully engraved upon one blade, *Cave perisse* upon the other.

There are various cases, in which you use the long forceps; but, as it is my object always, in these lectures, to simplify our

observations as much as may be, I shall confine myself, on this occasion, to that case in which the use of them is most frequently necessary, and which, properly understood, will enable you to comprehend their management in all other cases. This case, of all others the most frequent in its occurrence, consists of those laborious labours in which the child's head is detained at the brim of the pelvis, the face lying to the one, and the occiput to the other side; a large head, a narrow pelvis, and other causes, impeding the descent.

In cases of this kind, having warmed the forceps, not displaying them in the room, or holding them openly before the fire, but plunging them for this purpose into water of a proper temperature, or, grasping the blade in the hand, you prepare for introduction. Now, if the forceps are straight, you may first introduce either blade indifferently; but if, like the instrument here exhibited, it have a lateral curvature, select your blade, so that when introduced, the concavity of it may lie towards the symphysis pubis, and the convexity towards the sacrum, the shank of consequence receding from the sacrum. The blade being selected, take the handle of it in your right hand, and then slide up one or two fingers of the left into the cavity of the uterus, so as to interpose those fingers between the cervix uteri and the child's head; an operation this, which, if you are fit to use the long forceps, you may very readily perform. That, in this stage of the process, it can never be proper to carry the whole hand into the pelvis, I will not venture to assert, but in general this measure is needless, and being needless you will, I presume, agree with me, that it is highly improper, as there is a risk of lacerating the vagina. Having, then, interposed two fingers between the cervix uteri and the child's head, and this on the side of pelvis; for in the side it is that the pelvis is generally most roomy; you pass the blade of the instrument upon the fingers, and recollecting the aphorism *arte non vi*, with the utmost tenderness and gentleness, not forgetful that you are operating on the softer sex, and that a single rude thrust may pass the blade through the vagina, often asking the patient if you give pain, you very gently work the blade of the instrument along the side of the pelvis, where it ordinarily meets either the face or the occiput of the child, over which it glides and lies. And here let me remind you of what was before stated, I mean that the head being at the brim of the pelvis, the basis of the cranium lies above and anteriorly, while the summit is placed below and towards the coccyx, and the point of the sacrum, as now shown. In accordance, then, with this position of the head, the blade must be placed; that is, the point must be directed towards the umbilicus, and the shank must bear backward upon the perineum, as demonstrated by the apparatus, when, as you may here see, the instrument will be found, to lie very commodiously upon the head. The first blade being placed in this manner, you secure it in this position with the thumb and the two last fingers of the left hand, afterwards insinuating the two remaining fingers, say the first and second, so as to prepare the way for the introduction of the second blade. To pass up this part of the instrument, take, as before, the handle in the right hand, and having interposed the fingers between the child's head and the cervix uteri, and towards the back of the pelvis, so that the back of them lies near the sacro-iliac synchondrosis, pass the second blade along the fingers in the back of the pelvis, till you get it about half way to its destination. Having thus passed it half way towards its destination along the back of the pelvis; you work it with gentleness, as here shown, carrying it in a lateral direction, till you have transferred it completely from the back to the side of the pelvis; and then you carry it high up, so as to lay it over the child's head, the point being directed towards the umbilicus, and the shank being carried backward upon the perineum, in such a manner, that the two blades are brought as near as may be into apposition with each other.

Of the two blades, first introduce that which lies below in the left of the pelvis; for you will find on trial, that in this mode the junction at the lock will be most easily accomplished. And here, perhaps, you will ask me why, in introducing the second blade, I do not carry up the instrument, first along the side of the pelvis? The truth is, this may sometimes be done commodiously enough, but unless the pelvis of your patient lie close upon the edge, the bed furniture under this method of introduction frequently lies in the way; an inconvenience which you may avoid, by first sliding the blade, as directed, along the hollow of the sacrum, care being taken to keep clear of the aperture leading to the rectum. When then, in this manner, with the utmost gentleness, slowly, and without affected rapidity, the blades have been applied to the head, I lock them; careful, in forming the junction, that neither the linen of the patient, nor the perineum, are intercepted by the joint. If any portion of the perineum is included when you lock the blades, the woman exclaims "you are cutting me," when, of course, it becomes necessary to separate them immediately, to unite them afterwards with more caution. When the lock is completed, you may then, if you please, tie the handles by means of a riband, taking care, however, not to draw the

ligature too closely, lest you should occasion the blades forcibly to grasp the cranium, so as to compress the brain and kill. Draw the ligature with that degree of tension only, which will give the blades their bearing on the head; this is all the pressure the case requires, and in every operation of midwifery, the less force you use the better. And thus much respecting the *application* of the instrument. Observe the apparatus before you; it exhibits well the adaptation of the forceps to the head.

And now, having applied your instrument before you proceed to abstract the fœtus, recollect the two aphorisms already mentioned—*arte, non vi*, and *cave perinæo*. And having duly prepared the mind, by considering how requisite it is that you should be very gentle, and how great are the injuries which you may inflict by rudeness and violence, proceed. And here be it observed, as we enter on the next step of the operation, that if there are no pains, which sometimes in the worst of labours there are not, you must draw down in the absence of the uterine action; but if the woman have her efforts every five or ten minutes, instead of making the operation entirely artificial, you ought to wait and co-operate with the pains, often rather leading the head into the world, than pulling.

Even where pains are wanting, although you cannot co-operate with the natural efforts, yet I would advise you to imitate Nature, the fruitful mother of all the arts. Do not in these cases continue pulling without intermission, till you have got the head through the pelvis, but make an effort, and then pause for some four or five minutes; again making another effort, and again pausing, and proceed in this manner, till you gradually work forth the head; not forgetting, during the intervals of cessation, to examine the pulse, and to observe the countenance. That the smallest force which may bring the head through the pelvis is the best, you will no doubt all agree. Those who have been engaged a great deal in *difficult labours*, may now and then venture on the higher degrees of effort, to be conceded only to such as have had much experience; but in general, I would advise you not by any means to use the greater force; for if you do, the child is generally still born, and by contusion, fatal injury may be inflicted on the softer parts of the mother. If gentle efforts are insufficient to bring the head easily through the brim of the pelvis, I believe the better practice is to have recourse to the perforator.

If the pulse be 120 or 130, before you commence your operations, it is clear that you cannot, from counting the beats, take an intimation whether the softer parts have or not sustained injury; but if, before the forceps is applied, the pulse is under 100 in the minute, then, should contusion be produced by your efforts with the instrument, the rise of the pulse will indicate it. Without a rise of the pulse, contusion, I incline to think, rarely occurs, and if you find the pulse mounting from 110 to 120, 25, 30 in the minute, it is always proper to beware. After every effort with the forceps, therefore, count, waiting two or three minutes, so as to allow the beats to subside after the muscular exertion, and count completely round the circle. If you find it below 100, no serious injury has been inflicted; if the frequency is encreasing, although it do not necessarily follow that serious injury have been inflicted, yet the existence of contusion becomes probable, and further efforts must not be made without much further consideration. In using the forceps, I am myself careful never to neglect, between the efforts, this examination of the pulse. In drawing with the forceps, the instrument not infrequently slips from the head, this perhaps being rather an advantage than an evil, as it may preclude too much extractive force. It is easy to replace the instrument, and repeatedly, if necessary.

In abstracting the head with the forceps, you will find it an advantage to swing the instrument a little from side to side, giving it an oscillatory movement; sway the instrument extensively, and you will lacerate the perineum; it is only a confined motion that may be safely tried. Many efforts are not usually required; if, when the head is detained at the brim, it cannot be brought through the superior aperture by five or six pulls, it may be better to resign the attempt altogether, wholly or for a time. An imaginary line, stretching from the umbilicus to the coccyx, is the line in which the cranium passes the brim, and in this direction, on the whole, (the forceps, however, bearing a little forward from the perineum) the embryospastic force should be applied. At this time the perineum must be guarded with solicitous care.

On using the long forceps, according to the rules here prescribed, the cranium will frequently be found to descend with facility, more especially if the uterine efforts co-operate. When, however, the coarctation is more considerable, the abstraction of the head may not always be safely accomplishable. Now, in these cases, if immediate delivery be necessary, you must have recourse to the perforator, but should this not be requisite, you may withdraw blood—watch the patient, and wait a few hours, when the head, becoming moulded by the uterine efforts, and descending lower in the pelvis, under a second essay of the forceps, the fœtus may be safely brought. Thus, in the evening of the day, I have seen a living

fœtus abstracted by the forceps where no prudent use of the instrument could have withdrawn it in the morning. The cranial bones of the fœtal head are connected by cartilage, and the cranium in consequence becomes capable of readily changing in form and diminishing a little in bulk, the principal adaptation being obtained by the marginal lapping of the one parietal bone over the other, and by some little advance of the os occipitis, which may get forced beneath the edges of the ossa parietalia.

By these measures, with gentle embryospastic effort, co-operating with the pains, or imitating the pains, swaying the instrument a little from side to side, abstracting on the whole in a line stretching from the navel to the perineum and coccyx, very careful not to lacerate the perineum, not repeating the efforts too often, nor using a force too great, you gradually bring the head forth through the brim; and when once you are passed the superior aperture, you generally find the further progress of the delivery easy; for, it is at the brim alone, most frequently, that the narrowing exists. Now, when the cranium is at the outlet, some, inconsiderately, proceed with the extractive efforts, promptly bringing forth the head, but, at the same time, lacerating the parts, and laying the rectum and genital fissure into one opening. This is one of the nicest parts of the delivery. The vessel may strike and founder, in the entrance of the port. At this time, therefore, different practices may be adopted, and we may withdraw the instrument, and commit the birth to nature; or we may continue the application of the forceps to the head, gently assisting the descent with the instrument; or, removing the long forceps from the face and occiput, we may lay the blades over the ears, or we may use the lever, or the short forceps, as hereafter demonstrated. For myself, when the head is at the outlet, if the emersion require assistance, I generally retain the long forceps in their original situation over the face and occiput, supporting the perineum with the hand as here demonstrated, and gently leading the head towards the mons veneris, very careful not to lacerate; but if, as generally, the natural efforts are fully adequate to complete the delivery, after the passage of the brim, I then remove this dangerous instrument, and merely sustaining the perineum by manual pressure, to these efforts I trust. Should the forceps be used in this stage of the delivery, I advise you to hold the handles by the thumb, and a single finger only, as now shown,—a useful hint that you are not to employ too much force. As the head emerges, the face becomes turned upon the hollow of the sacrum; this turn you ought to encourage, for by means of it the long diameter of the head is brought into correspondence with the long diameter of the outlet.

The grand *error* you are apt to commit, in using the long forceps, is *force*. In violent hands, the long forceps is a tremendous instrument. Force kills the child, force bruises the softer parts, force occasions mortifications, force bursts open the neck of the bladder, force crushes the nerves—beware of force, therefore; "*arte, non vi.*" Other errors, too, there are, against which I beseech you to guard. You may use the forceps without need; you may try to use it when the parts are rigid, and the os uteri is not fully expanded; you may attempt to apply it, without knowing the position of the the head; you may oscillate the instrument too extensively from side to side; you may draw without intermission, instead of imitating the pains; you may close the handles too forcibly by the hand or ligature; you may hurry the head through the outlet; you may neglect to throw the face towards the sacrum; you may forget the perineum; you may fail to conduct the head, when it emerges towards the abdomen, and the mons drawing it too much upon the perineum. The fool-traps are set close here; it is difficult to enumerate or to avoid them all.

Tractor or lever.—The next instrument, the use of which I propose to demonstrate, is the tractor or lever, an instrument excellent, and of great effect in dexterous hands. If skill and judgment are wanting, even the tractor may inflict dreadful injuries; but, in such hands, still greater mischief may be expected from the long forceps; to you, therefore, I recommend its use as the safer instrument of the two—possessing also, in an eminent manner, the advantages of portability and ready application. By different practitioners, in different times, a variety of levers have been contrived; but one of the best that I know of, and that which, I believe, is generally allowed to have its excellencies, is the lever which was used by the late Dr. Lowder, resembling somewhat a single blade of a pair of forceps, whence it is often called the *single blade*. Its length should be about 14 inches. For the convenience of the pocket, it may be composed of two parts, separating in the middle, and uniting by a screw-joint, which may be secured by this small catch or spring. The handle of the instrument should be large and roughened and larger at the end, to yield a more tenacious grasp. The shank should be strong, for I have heard of its breaking short when in operation. I think it is as well, provided you are going into the country, to have two blades; one with a bold curve, the other less incurvated. The lever, with the milder curve, introduced

more easily, is liable to lose its hold; the bolder curve is introduced with greater difficulty; but when once applied to the head, it keeps its place with greater tenacity, and enables you, therefore, to use a more effective effort.

The cases in which the lever may be employed are various, and I might bewilder you by relating many; but as with the long forceps, so here, in a view to practical information, I think it convenient to confine my remarks to a single case only, for this case, comprehending in itself all the general principles of management, will enable you to understand the method of manœuvering the lever in all the other cases where instrumental help may be required. Now the case on which I propose to demonstrate the use of the lever, is that in which I have already been demonstrating the use of the long forceps, and which, among the laborious labours, is of all others the most common in its occurrence; that labour, I mean, in which the cranium is detained at the brim of the pelvis, in consequence of a want of room between the front and back.

By different teachers and different practitioners, you will find that different rules are laid down for the management of this instrument. Of these, however, the best, in my judgment, are those of Lowder, as improved by my friend Mr. Gaitskell, of Rotherhithe, and recorded by him in the Medical Repository of September 1823; and I would advise you by all means to make a copy of these rules, for, to me, they appear on the whole excellent. When you are about to use the instrument in Lowder's mode, the rectum should be cleared, if necessary, and the bladder should be evacuated; the woman too ought to be placed upon her left side, near the edge of the bed, with a bearing of the feet upon the posts, and the softer parts should be thoroughly relaxed, and the os externum et internum should be open; and, in a word, all those preliminary and precautionary measures should be observed, which were enumerated when we treated of the long forceps. Before you use the tractor, too, you should have a clear reason for doing so; so that if any body should enter the room, and ask why you are going to use the lever, you might be able to give him a good and sufficient answer; because there is a contraction of the brim of the pelvis; because there is a bearing on such and such a bone, so that without assistance the cranium cannot descend. Moreover, you cannot use the instrument with science or safety, unless you have ascertained clearly what is the position of the head; and if your skill is such, that you deserve trusting with an instrument of this sort, you will be able, with proper examination, to make out this position with ease.

Let us suppose, then, that these precautionary measures have been taken; let us suppose the parts to be lax, and the rectum and bladder to have been emptied, and the posture of the woman to be commodious, and the position of the head to have been ascertained, the face, for example, lying to the left, and the occiput to the right side of the pelvis, and let us suppose, too, that the deficiency of room, and the nature of the obstruction, have been clearly proved and detected,—under such conditions, how are we to use the instrument?

When you are going to introduce the lever, the head being at the brim, you had better first pass up all the four fingers of the left hand, and taking care that you do not lacerate the parts, of which there will be but little risk, if they are thoroughly relaxed, you may interpose those fingers between the side of the occiput and the sacro-iliac synchondrosis, and this with a view of preparing the way for the insinuation of the blade. This point accomplished, you may then take the instrument with your right hand and glide it up between the fingers and the side of the occiput, as usual—*arte, non vi*—with the utmost gentleness, taking five or ten minutes for the introduction if necessary, recollecting that the end proves every thing, and that if no injury be inflicted and the patient do well, it matters little whether you occupy ten minutes or ten seconds with the introduction, for although a needless tardiness is to be condemned in instrumental practice, hurry is more dangerous than delay. In this manner then, having placed the blade upon the side of the occiput, you withdraw your fingers and lay hold of the shank at the screw, that is, at the centre of the instrument; and still grasping the handle of large size with the right hand, you manœuvre the instrument a little, so as to bring it over the back occiput, into the side of the pelvis. At this time the tractor, as here shown, takes the position of the long forceps, lying over the back of the head, with the shank behind and the point advanced; in a word, on a line—which stretches through the middle of the superior aperture from the umbilicus to the perineum—and thus the blade, bearing firmly on the occiput, you have great power over the head.

The instrument, then, being applied in this manner, you grasp the handle with the right hand, and the middle of the shank with the left, and by the co-operation of the two, pressing down upon the cranium, you support a steady bearing on the occiput, without, however, resting on any part of the mother as a fulcrum; for the instrument ought to be used, not as a lever but a tractor. Well, securing the head in this manner, you wait for a pain; and when the uterus is in

action, you draw; sometimes, even drawing a little when the pains are feeble; for, by drawing, the strength of the pains may occasionally be increased. The head advancing, and the pain ceasing, pause, not suffering the operation to be altogether artificial, but co-operating with nature, and the pains recurring, draw again; and thus, by repeated efforts, sometimes two or three only, sometimes twenty or thirty, you bring the head down through the brim into the cavity of the pelvis, at the same time depressing the occiput, when, very generally, the whole of the difficulty is overcome. The head being, in this manner, by the first step of the operation, brought down into the cavity of the pelvis, at the close of it, we usually find the chin lying on the chest, and the head, of consequence, occupying but little room, as the apparatus demonstrates; for it is an excellence in the tractor, that it not only draws down the head, but that, depressing the occiput, it at the same time brings the chin upon the chest, so as to put it into the position most favourable to transmission, as formerly explained.

In making these efforts with the tractor, remember that the smallest force adequate to your purpose, is the best; that a judicious and well-managed gentleness, is peremptorily requisite; and that death will ensue from violence; after every effort, therefore, as in using the long forceps, you ought to look at the countenance, and count the pulse, ascertaining, in this manner, whether you are or not inflicting injury on the softer parts.

When the head is in the pelvis, the natural efforts will frequently expel it, and therefore, as in using the long forceps, it may often be better to commit the birth to the natural efforts. I will suppose, however, that the natural efforts are inadequate for this purpose; well, in this exigency, it becomes proper to give further assistance with the tractor, changing altogether the position of the instrument. For this purpose, first carry up two or three fingers of the left hand over the face of the fœtus, interposing them between the head and the bones upon the back of the pelvis near the synchondrosis, where the face usually lies; then taking your instrument in the right hand, glide the blade over the face of the child, carrying it so high that the fenestra, by which I understand this opening in the middle of the blade, may admit the chin, the limbus resting upon it. Well, having accomplished this, withdraw your fingers, and lay hold of the shank at the screw joint as before, and giving a lateral movement by the co-operation of the two hands, so change the position that the shank lies over the ear, the screw which is in the middle being in a line with the vertex, and the point of the tractor still resting on the chin, the instrument lying over the side of the cranium like one of the blades of the short forceps. Well, now, in this way, having obtained a very secure hold of the one side of the cranium, planting two fingers, the first and second, on the other side, you lay hold of the shank with the thumb and two remaining fingers, and grasp the head as securely as if within a pair of forceps. The pains coming on, you then draw down without violence; after every effort, as before, counting the pulse; and moreover, in drawing the head down, you are careful to direct it as much in the axis of the outlet as may be, conducting it towards the mons and from the perineum; for by so doing, you greatly diminish the risk of lacerating this part.

In using the tractor, the following are the *errors* which you are liable to commit, and with the enumeration of which I shall conclude the lecture: you may introduce the lever before the softer parts are thoroughly relaxed, and before the os externum and internum open: of this error, contusion, laceration, and death may be the consequences. Again, when the head emerges from the outlet—in an unguarded moment, particularly if, as frequently, the head be large, you may tear the perineum so as to lay the genital fissure open into the anus. Further, you will observe, that the lever is to be used in two modes; being applied over the occiput, when the head is at the brim, and over the sides when it is at the outlet; hence another error which you may commit, I mean the applying the lever without considering the situation of the head, whether it be at the brim or the outlet of the pelvis; and unless this be ascertained, assistance cannot be administered with this instrument in a scientific manner. The using continual extractive force, without waiting for the pains, is another grand error which you may commit. Here, as on so many other occasions, the stoical maxim is excellent: sequere naturam—imitate nature, as far as may be; first, because occasional efforts are less likely to injure the woman, than continual extractive force, and secondly, because the instrument may prove, in good measure, powerless, without the assistance of the pains. When you are not drawing down, to continue bearing with the blade upon the cranium is another error. If you have a fold of the umbilical cord between the head and the instrument, by a continual bearing on them, you may interrupt the circulation and destroy the child; and even if you have not, continued and strong pressure may so far injure the brain, that it comes into the world still born. Remember, therefore, when you are drawing, that it is during pain only that the effort should be made, and that

when the pain ceases, the tractor should be a little raised from the cranium.

When we meet again, we shall treat of the use of the short forceps, and then touch upon an important subject; namely, the principle which will enable you to decide in what cases instruments are required, and in what cases they are not.

LECTURES ON CHEMISTRY,

BY

PROFESSOR BRANDE.

Delivered at the Royal Institution of Great Britain.

Lecture XXXVII.

On Lead, Antimony, and Cobalt.

We now arrive at the action of *chlorine* upon *lead*.

If lead be precipitated from its solution by a solution of common salt, it forms a *chloride of lead*, which, when crystallised, like the other chlorides, puts on a horny appearance. You will remember, in regard to this precipitate of lead, that it is sparingly soluble in water, and that chlorine, therefore, is not a good test for the presence of lead; and it may be further mentioned, that it is soluble in nitric acid. Now when common salt and *litharge*, which is merely a vitrified or fused protoxide of lead, are mixed together, they gradually act upon and decompose each other; the sodium of the salt combines with the oxygen of the lead to form soda, and the chlorine of the salt combines with the lead to form a chloride of lead. Here is a mixture of litharge and common salt, and we will dip a piece of turmeric paper into it, and we shall find that it is alkaline, from the formation of soda. The white residue is a mixture of oxide of lead and chloride of lead, which, when fused, puts on a yellow appearance, and is called *patent yellow*, a pigment used very much for carriage painting, and so on.

Iodine and *lead* combine, and form an *iodide of lead*, and we show you this compound, because iodine is commonly employed as a test of the presence of lead. We will take a weak solution of the nitrate of lead, and add to it the hydriodate of potash; we shall find that an iodide of lead will be formed by a delicate decomposition of the two substances; a precipitate falls down in the form of a yellow powder, which is difficultly soluble in water, and is composed of 104 lead, and 125 iodine, so that its number is 229. It has been used as a pigment; but none of the iodides stand exposure to air well.

When lead is digested in nitric acid, the metal is oxidised at the expense of the acid, and a *protonitrate of lead* is formed, composed of two proportionals of oxide of lead 112, and one proportional of nitric acid 54, giving 166. It is soluble in eight parts of boiling water; it contains no water of crystallisation; its crystals are octaëdra and tetraëdra, of a pearly appearance, and sweet astringent taste. It may be formed by acting upon metallic lead, or any of its oxides, by nitric acid. It is often employed in the laboratory as a test for certain substances, to be pointed out hereafter.

Sulphur and lead combine artificially, and form a black compound, which is the sulphuret of lead, and which is generally known under the name of *galena*, the most abundant of all the ores of lead. It is composed of one proportional of lead, and one of sulphur, 104 and 16, giving 120 as its equivalent. It crystallises primitively in the cubic form; but there is a great variety of modifications, of which you see here some specimens, octaëdra, and so on. What is called *slickensides* by the Derbyshire miners, is a variety of the sulphuret, and when struck by the pick, it often flies asunder, with a kind of explosion.

Metallic lead is obtained from these ores by the simple operation of driving off the sulphur by heat, and then heating the oxide of lead left, in a reverberatory furnace with charcoal. Galena often contains a notable quantity of silver, and when it contains six or eight ounces in a ton, it is worth working for the silver. The process for separating the silver is this; the lead, instead of being reduced by exposure to charcoal, is exposed to heat and air, and is converted into an oxide, which assumes a vitreous appearance, and is called litharge; but the silver contained in the lead is incapable of being altered by this action of heat; so that after the lead has been oxidised, and the oxide blown off from the surface as fast as it forms, the silver remains at the bottom of the furnace, cupel, or crucible. The separation, then, of the silver, depends upon the more oxidisable property of the lead than of the silver, by this process of *cupellation*. Lead is an article of vast importance in commerce in this country, especially in Derbyshire and Scotland. Our exportation is from 45 to 50,000 tons annually, the metal being obtained in great quantity from the fine ores of lead which we possess.

The *sulphate of lead* may be obtained by boiling metallic lead in sulphuric acid; sulphurous acid is evolved, and a white sulphate of lead formed. It is insoluble; and

when I say it is insoluble, you will understand that I am speaking of a substance very nearly insoluble; in twenty thousand parts of water it is soluble; but, in common language, it may be called insoluble. It may be easily prepared, by adding to a solution of lead some sulphuric acid. Now, here is a solution of sulphate of soda, and here a solution of acetate of lead; instantly that they are mixed, a white cloud of sulphate of lead, a dense insoluble white powder, is thrown down. It consists of one proportional of acid 40, and one of the oxide of lead 112, giving 152. In separating lead in analytical experiments, we usually content ourselves with precipitating it in the form of the sulphate, and then dry it in a heat approaching to redness; we consider it as a pure sulphate of lead, and we easily ascertain the quantity of metallic lead it contains, from the table of proportionals. For example: 104 is the equivalent or representative number of lead, and 112 is the equivalent of the protoxide; 40 represents sulphuric acid, and 152, consequently, the sulphate of lead; so that, in the sulphate of lead, the table indicates that there are 40 parts of sulphuric acid, and 112 of the protoxide, or 104 of metallic lead.

Sulphuretted hydrogen and lead combine to form a black or deep brown compound; and it may be easily made, by adding a solution of sulphuretted hydrogen to a solution containing lead: a dark brown precipitate is thrown down, which is a *hydrosulphuretted oxide of lead*, and this becomes black on exposure to air. We avail ourselves of the colour of this precipitate, to indicate the presence of lead in solutions. Here is a solution of the hydrosulphuret of ammonia, and I shall prepare, in another glass, a very dilute solution of the nitrate of lead. When I mix the two solutions together, you observe this discolouration immediately produced, and I have here a very weak solution of lead, only a drop or two of the solution of the nitrate in the glass. So that you see the value of this mode of ascertaining the presence of lead, in conjunction with other tests.

Phosphorus and lead combine to produce a *phosphuret of lead*, a brittle compound, having at first the appearance of metallic lead, but it is a compound of no use or importance. The *phosphate of lead* is of a yellowish white colour, and is soluble in the alkalies, and in nitric acid; it occurs native as an ore of lead: its composition is 112 protoxide of lead, and 28 phosphoric acid, giving 140. The *carbonate of lead* is easily precipitated from a solution by any carbonated alkali, and this is a very delicate test of the presence of lead, giving a white precipitate; its composition is 112 of the protoxide of lead, and 22 of carbonic acid, giving 134 as its equivalent. Well, now as to the white powder which the carbonate forms, known in the general way under the name of *white lead*, which forms the basis of white, and of a great many other paints; it has the property of combining into a soapy mixture with oil, and forms the basis of many colours. It is liable to many objections; as spotting and discolouring on exposure to light, especially in London, where so much sulphurous vapour is contained in the atmosphere. If sulphuretted hydrogen be added to it, it becomes grey, brown, and then black; and if sulphuretted hydrogen come in contact with substances coloured with the carbonate of lead, they become of a dingy colour; and, in water closets, the paint is almost invariably discoloured from this cause. It is found native sometimes in octoëdra, in acicular crystals of great beauty. As an ore, it is, generally speaking, not of any importance; but, in mining, it sometimes happens that they come upon bunches of the carbonate, and it is then used as a source of the metal.

The ferrocyanate of potash, when added to a solution of lead, produces a white precipitate, which is a *ferrocyanate of lead*; and although, from the colour of the precipitate, you might not expect that there is any iron in it, it is there in combination with the oxide of lead. I have shown you these different tests of lead, with a view of pointing out and enabling you to detect the metal, when in minute proportion in any solution; so that, by the nature of the precipitate produced by iodine, by phosphorus, by sulphuric acid, by carbonic acid, by carbonate of potash, sulphuretted hydrogen, or hydrosulphuret of ammonia, and, lastly, by the ferrocyanate of potash, you have the characters of this metal shown. It happens that water is sometimes impregnated with lead; but it happens also very luckily, that almost all the salts of lead are insoluble, and rarely, indeed, is it found in any solution; but when the carbonate of lead is taken up by mechanical suspension in water, although in very small quantities, it produces what is called *painters' colic*. With the nature and treatment of this complaint, I have nothing to do; but you should take the sediment of the water, and digest it in nitric acid, by which you would have a nitrate of lead produced, and you might then easily discover the presence of the metal, by any of the tests I have named.

Among the *alloys* of lead, we may name *pewter*, which is composed of 80 parts of tin, and 20 parts of lead, or thereabouts, for the better sort of pewter. Equal parts of lead and tin form *plumbers' solder*, which is more fusible than lead itself, but which answers very well for uniting leaden pipes, and so on. Equal parts of lead and copper consti-

tute *pot metal*, and there are some other alloys into which some of the other metals enter, as in the alloy for making printers' types, britannia metal, and others, to be considered by-and-by.

Antimony, the next metal on our list, is chiefly important in its application to medicine; it exists native, and, in combination with sulphur, constitutes an ore in which it is found in tolerable abundance. The native *sulphuret of antimony* is cast into moulds of this kind, and is brought into the market under the name of crude antimony.

Now, in order to obtain pure antimony from the sulphuret, we must reduce it to powder, mix it with tartar, and apply a brisk red heat; the sulphur combines with the potash of the tartar, and is burnt off, and you obtain a button of metallic antimony in the crucible. If we wish to obtain the metal still more pure, we must dissolve it in muriatic acid, precipitate the solution, and reduce the precipitate. The number 45 represents antimony, and there are two oxides of the metal—the *protoxide*, consisting of one proportional and one; and the *peroxide*, consisting of one and two. In a medical point of view, it is necessary to draw a distinction between these two oxides, since the one is very powerful, in the dose of even half a grain, being violently emetic, and half an ounce of the other is very inactive and almost inert; and states of the oxidisement of the metal between these two points appear to possess a mean of activity. The *protoxide* is obtained by dissolving the metallic antimony in muriatic acid, and precipitating it by pouring the solution into water; and, if you then wash the precipitate with a weak solution of potash and dry, you get a white powder, which is the protoxide of antimony. It is also prepared by boiling the solution of the metal in sulphuric acid to dryness; by washing the dry mass, first in water and then in a weak solution of carbonate of potash. When antimony is exposed to heat, it fuses and oxidises very readily, the result of which operation is, that the protoxide of antimony is collected in beautiful acicular crystals in the chimney, which were formerly called *argentine flowers of antimony*; but if you expose it to a second operation of heat, or throw a current of oxygen upon the burning antimony, a *peroxide* will be formed, but the nature of the substance you will obtain will be a mixture of the two oxides, in variable proportions. Here is a small portion of antimony, which I shall burn in order to show you its easy combustibility. The *peroxide* is procured by heating antimony with nitric acid, or by projecting metallic antimony and nitre into a hot crucible, by which a compound, formerly called *diaphoretic antimony* and Bezoar mineral, is obtained, which is almost entirely the peroxide. The protoxide exists in all those salts of antimony which are active; it exists in small quantities in *James's powder*; it exists in the *golden sulphuret of antimony*, and in the *emetic tartar*; and in many of the preparations of antimony which have been properly rejected from pharmacy. We shall have little to say of the properties of antimony, because we shall reserve our principal remarks upon it to the consideration of emetic tartar, which is the most important compound, and seems to be the only one necessary for medical use.

Chlorine and antimony unite to form a *chloride of antimony*, in the relative quantities of one proportional and one; and Dr. Thomson has recently discovered a bi-chloride of antimony. If you put antimony in the powdered state into a jar containing chlorine, the metal, you observe, takes fire; white fumes are formed, which, after a time, condense into a grey mass, which is chloride of antimony, formerly called *butter of antimony*, from its greasy appearance. The solution of the chloride in muriatic acid was formerly called muriate of antimony, which is decomposable by water; and this is one of the characters of antimony, that its muriatic solution is decomposable by water only, a hydrated protoxide of antimony and muriatic acid resulting from the decomposition. The *sulphuret of antimony* is easily formed artificially, but we seldom have recourse to it, as it is an abundant natural product, and here are specimens of it in the natural state. Now, if you fuse this substance and expose it to air, a quantity of sulphur flies off, and the antimony becomes a protoxide, which, in addition to its being very active as a poison, and very volatile, is very fusible, so that, when you obtain it at a high temperature, it runs into a glassy mixture, and is known under the name of the *glass of antimony*; it is the protoxide of antimony, holding a little of the sulphuret in solution, and it is a very active preparation. Formerly a compound was used in medicine under the name of *crocus metallorum*, or liver of antimony, which is merely the glass of antimony, containing a large quantity of the sulphuret; and there were several other compounds of a like kind, which have been very properly rejected from the pharmacopœia, so that the number of preparations of antimony is now very much reduced.

When the sulphuret of antimony is boiled with a solution of potash, and the liquor filtered while hot, you obtain *hydro-sulphuretted oxide of antimony* in the solution, which, as you observe here, as the solution cools, is deposited in the form of a brown powder, and it is a true hydrosulphuretted oxide, which was formerly called *Kermes mineral*,

and is a very violently acting antimonial. The liquor being poured off, still holds sulphuret of antimony in solution, and by adding diluted sulphuric acid to it, a precipitate falls down, formerly called the *golden sulphuret of antimony*; it is the *antimonium sulphuretum precipitatum* of the present pharmacopœia, a very objectionable term, it being by no means a sulphuret of antimony, but a hydrosulphuretted oxide of that metal. I mention these compounds to you, because they were much employed formerly in medicine, not because they are of much use. There is an article long known in the shops under the name of *James's powder*, and it has retained a deserved celebrity as an antimonial. The form given for making it is too ridiculous to describe here; but the result of the farrago of materials is, that a powder is produced and sold under the name of James's powder, acting as a powerful sudorific, and it is very uniform in its action. How it is manufactured, and what its composition is, I shall not stop to discuss. Dr. Pearson supposed, that it was a mixture of the oxide, with phosphate of lime; my opinion is, that it is a mixture of the per and protoxide with the phosphate of lime; but it is a compound which I do not know. The *Pharmacopœia* has ordered a *pulvis antimonialis*, which was intended as a substitute for the James's powder; but if you look into the process as there directed, you see how ridiculous it is; because if the operation be moderately lucky, the whole of the antimony flies up the chimney, and you have nothing left but bone earth; and if you proceed differently, you obtain a mixture of the peroxide with bone earth, which I have before said is almost, if not altogether, inert; so that you can put little dependence upon antimonial powder as commonly prepared. If it be desirable to have a compound like James's powder, containing a certain quantity of bone earth, which, by the bye, is of no use, you might take a certain quantity of peroxide, as there are some who think it right to have a variety, and add a certain quantity of the protoxide to it, or to bone earth, and you would then get an uniform product, and a very useful product it would be, giving you the protoxide minutely divided. But according to the Pharmacopœia directions, I will venture to say, that you will never get a compound twice alike. In our pharmaceutical processes, it is our object to obtain a protoxide in a tolerably uniform quantity, and the method of obtaining this, consists essentially in roasting the sulphuret at a dull red heat, so as to drive off the sulphur and obtain the antimony; it is continued to be exposed to this heat until the fumes cease to rise, and toward the last part of the operation, you must heat it to a white heat, in order to give it a white colour, as it was of a dirty colour before. But to do this, you jam it into a crucible, so that the antimony is not all dispelled, as it would be, if spread out upon a flat surface, as directed by the Pharmacopœia. Upon the whole, I think that the antimonial powder ought to be rejected; I say nothing against James's powder, because I believe it is useful, but the *tartarised antimony* may be deemed the standard preparation of antimony.

An *alloy* of one part of antimony and sixteen of lead, constitutes the metal used for making *printer's type*, and the metal upon which *music* is generally engraved. An alloy of antimony with iron very frequently leaves a beautiful star upon the ingot, and the alchymists entertained a great veneration for this star, thinking that it would lead them to the discovery of the philosophers' stone, and they set to work for five years, but all their researches ended in nothing. If you heat metallic antimony with tartar or tartrate of soda, you obtain an alloy of potassium, or sodium, and antimony. I shall introduce some of this alloy into water, and you will observe that it effervesces; and if I reduce it to powder, it becomes so hot as to take fire, constituting a kind of pyrophorus; but besides that, the alloy is of no importance.

Cobalt. This metal will not detain us long. It is found in various states of combination, but, in general, in the form of very complex combinations or alloys with iron, arsenic, nickel, and copper, and contains a quantity of sulphur, and it is no easy matter to separate these substances from it; and I must refer you, for the details by which pure cobalt is obtained, to chemical works.

The metal is of a yellowish grey colour, and resembles iron, in being capable of being acted upon by the magnet. The number of cobalt is not satisfactorily decided, and, therefore, I shall not allude to its compounds. I must refer you to Dr. Thomson's work on the atomic theory, for the statements given of it; but I am not satisfied with the results. Cobalt, when fused with flint, is brought into the market under the name of *sapphire*, from its blue colour; and, when mixed with glass, it is called *smalt*; and here you begin to see the value of the oxide of cobalt, in giving a fine blue colour to bodies which will bear a red heat; it is, therefore, used in porcelain apparatus, and for staining glass blue; and, in short, all the blue ware you see in common use, is coloured by the oxide of cobalt.

The salts of cobalt in the diluted state, have a pink or reddish colour; here, for example, is a solution of the oxide in muriatic acid; here a solution in nitric acid; here is a sulphate of cobalt, but if you apply heat to either in the crystallised state,

you drive off the water of crystallisation, and they become of a green or blue colour, and, on being again dissolved, they acquire a red colour, and weak solutions of their salts are therefore employed for *sympathetic* inks.

In the next Lecture, we shall go through several of the metals of little importance, and enter on the history of *arsenic*.

FOREIGN DEPARTMENT.

HEMIPLEGIA TREATED BY THE ALCOHOLIC EXTRACT OF NUX VOMICA.*

Rosa Baffoni, æt. 56, had experienced, fifteen years before, during her pregnancy, an attack of apoplexy, of which she had been nearly cured, a slight impediment only of the speech remaining. In the month of August, 1824, she had a fresh and more violent attack. Dr. Chiavelli employed, for some time, the antiphlogistic plan of treatment, under which the symptoms diminished; but, at last, an incomplete hemiplegia of the left side remained. The arm was completely paralysed, but the leg could be moved in a slight degree. M. Chiavelli proposed trying the strychnine, which is considered by M. Magendie to possess a peculiar influence on the spinal marrow. On account of the debilitated state of the patient, M. Chiavelli was unwilling to employ the pure strychnine, and only ventured on the alcoholic extract of nux vomica, which was at first administered in half grain doses, and afterwards given in one and two grain doses, morning and evening. The medicine, at first, caused considerable excitement and disturbance of the system; these symptoms, however, soon disappeared, and under the use of the remedy, the patient completely recovered.

HYDROPHOBIA.

In no part of South America, says M. Unaneu, in his topography of Lima, was hydrophobia formerly known. It appeared, for the first time, in the summer of 1804, to the north of Peru, during an excessive heat, on which occasion Fahrenheit's thermometer was sometimes at 99½°; nearly all the animals were seized with madness, especially dogs. It was only in 1807, that it appeared in the capital: in the town of Jea, forty-two persons died of the bites of rabid dogs. On the north coast, the disease developed itself spontaneously in several individuals. In 1808, the disease disappeared. In some dogs, the complaint made its appearance twice; but a bite from the animal with the second attack, was not followed by any serious consequences.—*Zeits. von Henke.*

HYDROPHOBIA.

Doctor Barbantini,* of Lucques, relates a case of hydrophobia, which deserves being noticed. A person was bitten by his dog, at which he was very much alarmed; and the alarm was increased, by the circumstance of the dog not being afterwards seen. The disease made its appearance, and for four days the patient could neither swallow fluids nor solids. On the ninth day, the dog returned in perfect health, when it was immediately let into the bed-chamber of its master, whom he caressed as usual. From that moment, the hydrophobic symptoms gradually disappeared.—*Ibid.*

TABLES OF MORTALITY.

M. Odier has been lately engaged in investigations on the average duration of life in Geneva, all of which show a gradual extension of the period. The inquiries of M. Odier go as far back as 1560, and may be fully relied on. From 1560 to 1600, the average duration of life was eighteen years and five months; from 1600 to 1700, it was twenty-three years and four months; from this time, the period became gradually longer; and, from 1815 to 1826, the average was thirty-eight years and ten months.—*Bibioth. Univer. de Genev.* t. xxxvi. 36. 1827.

DERANGEMENT OF THE CIRCULATION.

In addition to the physical and moral causes which are acknowledged to produce derangement of the circulation, M. Broussais mentions certain morbid phenomena which appear to exert a peculiar influence on the circulating apparatus; these are reddened and inflammatory appearances of the blood-vessels, which are observed in some persons after death, particularly those who have died of eruptive diseases; as small-pox, measles, &c.—*Annal. de la Med. Physiolog. Oct.* 1827.

INOCULATION OF THE PLAGUE.†

The consul-general of Sweden, at Tanger, M. J. Graberg, in a communication which he sent on the 10th of August, 1819, to the Royal College of Health, of Stockholm, states, that the Spanish physician, Sarafino Sola, who has resided there from the com-

* Giorni Orit. di Med. Anclitica. Milano. Sept. 1827.

* Giornale di Fisica, Chimia, &c. T. x.

† Zeitsch. für die Staatsarz: 6e Jarg. Heft. p. 224.

mencement of the plague, has inoculated, with the permission of the government, some Spanish deserters, with the pus from pestilential buboes, mixed with an equal quantity of olive oil. The pus was taken from those persons who had the most severe attacks of the plague: fourteen individuals were inoculated with twelve punctures each of the lancet. In eight out of nine, four incisions, two inches in length, were made with a knife, and olive oil, mixed with pus, was injected into them. In seven of these cases, not the least trace, not even local or general symptoms were observable; in the seven others, between the fourth and tenth hour after the inoculation, a few trifling symptoms were observed, viz. in three, a small pustule in the groin; in one, a carbuncle at the spot of inoculation; in three others, general symptoms, and great irritability around the incisions. They were confined in a room, and as the symptoms began to appear, olive oil was administered internally, and employed externally. All the patients enjoyed very good health, without the use of any other means, the greater number in twenty-four hours, and the remainder in a very short time.

CHEMICAL ANALYSIS OF POLYGALA OF VIRGINIA (POLYGALA SENEGA, L.)*

M. Giacomo Folchi, professor of materia medica at Rome, has been lately engaged in examining the component parts of the remedy. He has found the root of polygala of Virginia, to be composed of a thick oil, in part volatile, of free gallic acid, acrid matter, yellow colouring matter, a small portion of wax, extractive gum, an azotic matter similar to gluten, and ligneous fibre; of the subcarbonate, sulphate, and muriate, of potass; of the carbonate, sulphate, and of a small portion of the phosphate, of lime; of the carbonates of magnesia, iron, and silex.

CANTERBURY TALES.

Conjectures on the Process, by which the Archbishop of Canterbury creates a Doctor of Medicine; addressed to Sir HENRY HALFORD, *President of the Royal College of Physicians.*

Sir,—The high professional rank, and distinguished situation you so deservedly hold, induce me to address you on the present occasion. Since your elevation to the chair, you have exhibited a very pure specimen of classical composition; your urbanity has been proverbial, and your conduct towards your professional brethren has borne the character of dignified moderation.

To your learning, perspicuous examinations, and mild authority, we have hitherto trusted for the creation of our metropolitan physicians; and in these deliberations concerning the fitness of a candidate, you have in the body of censors the generous assistance of a council. But with surprise I find you have a competitor, an iatropoietic rival, a man of a different cloth; a spiritual nosologist, who, by some mysterious afflatus, can instantaneously blast a man-midwife into a doctor.

Are these metamorphoses, which the wand of Harlequin would have disdained, to be legitimately incorporated with the *conversions* of an ecclesiastical primate?

Having commenced with this utero-astrictus, may not the same prelate extend the like discrimination and favour to others; and proceed to dub his tooth-drawer, his chiropodist, or the "callidus aliptes," that shampoos his Grace? No class of men understand better the value of learning than the clergy; it is the great instrument by which they have been advanced to temporal distinctions, and to their contingent emoluments. The whole of the existing bench of bishops have been educated at Oxford or Cambridge, and they feel reluctant in ordaining such as present themselves from other universities. The College of Physicians insist on a residence at certain universities, and a previous diploma, before they will proceed to the examination of a candidate. Why then should the mitre, in defiance of these wholesome establishments, interpose an unrepealed abuse, an obsolete remnant of monkish fraud and imposture, to sanction a probable depredation on the health of his Majesty's loyal subjects? Under the act of toleration, any miserable fanatic or canting hypocrite, may purchase at the quarter-sessions, for his half-crown, the title of a licensed teacher, and infest the highways and hedges, or *the ruins of a fallen theatre*, with his rant and denunciations; but the archbishop does not countenance these extravagancies and profanations of his own craft.

Why then should his Grace degrade an honourable profession, by tearing down the fences that oppose an entrance to the unqualified? Why should the public health be endangered by the introduction of such as the law has disqualified? The Archbishop is fully aware that his formidable and deleterious power cannot constitute a surgeon—he is unable to appoint any of his retainers a member of the Company of Apothecaries—he is incapable even in the city of Canterbury, in the soil of his own domination, of setting up a barber, with the prurient emblems of the long pole, and the phlebotomising gar-

* Bibliotheca Ital. Milano, Octobre, 1827.

nish of the red rag. Notwithstanding these incapacities, the Right Reverend feels himself competent, *ex nihilo*, to create a physician; a signal proof that, in archiepiscopal logic, the major has no pretensions to include the minor. But, Sir, after a candid examination, having obtained your fiat, and that of your colleagues, for the exercise of the profession of medicine, I am particularly anxious to learn the ceremony that was employed, to render this professor of the tactus eruditus—this special bail for the security of the perineum—this eaves-dropper of the os tincæ, competent to prescribe in the wide range of human infirmities. Did his Grace's Chaplain plumb his depth in Latin? Did he sound him in Greek? or did he gauge his orthodoxy? What was the nature of the holy diploma he obtained? Did it commence after this fashion? Sciant omnes, *me*, Archiepiscopum Cantuariensem, medicinæ inscium, nunquam examinasse, sed admisisse Doctorem Sloppum ad facultatem medicinæ exercendam, quamdiu vixerit, per totam Angliam. Amen. Or, has he no parchment and extensive stamp to exhibit? In the regular order of human events, I ought next to inquire, what species of doctor he has been dubbed; for, unhappily, in the natural history of physicians, there are two distinct orders, the Socii and Permissi. The former are said to constitute the College—they enjoy a "local habitation and a name"—they issue their mandates for the nomenclature and preparation of all medicines, as inclination may lead, or fancy dictate—they become the arbiters of human intellect, and levy a heavy taxation on the keepers of these metaphysical retreats. As the Pope dispenses his indulgencies, they sell their licenses; which they partly consume in costly viands, and in the choicest products of the vintage. O, fortunati nimium! Contrasted with these dignified and pampered Benedictines, is the famished order of the Permissi:—a houseless and vagrant community; supposed, as Ben Jonson said of Shakspeare, "to be of small Latin and less Greek," and which, had he lived in our time, he would have said of his namesake, Jemmy de Fasciculis, of pedestrian habits, and in the pitiless pelting of the storm, only protected by the shelter of an umbrella. From imperious necessity this tribe is compelled to industrious exertions, and obliged to follow the antiphlogistic regimen they prescribe for their patients:—and numbers may be daily observed in rusty black, and old spectacles, foraging in lanes, or gleaning the aliquot parts of a guinea, in obscure courts and in blind allies. I was about to inquire to which of these orders the ecclesiastical prelate has appointed his minion; but I have learned with regret, that the extemporaneous formula of his Grace, constitutes him a Socius, in plain English, a Fellow of the College. This is, at least, a proof of the Archbishop's taste.

"Non nisi delecta pascitur ille fera."

Thus, Sir, although the Right Reverend cannot compound a Permissus, he may manufacture a Fellow, and amalgamate him with the College, ut in unum coëant, according to the chemistry of Athanasius: and although his foot has never sullied the classic ground of Oxford or of Cambridge, future candidates may be rejected by the censorial imbecility of this peeler of the placenta.

I wish you much joy of your new acquaintance,

And am, Sir,
With every sentiment of respect,
PETER PERMISSUS.

SUPPLY OF SUBJECTS FOR DISSECTION.

To the Editor of THE LANCET.

SIR,—I am too fully persuaded of the value of your pages to desire to occupy them unnecessarily, or at length. The difficulty in procuring subjects for the purposes of anatomical science is notorious, and the prejudice against even the practice of dissection is as extraordinary as it is ridiculous: it belongs to an age of barbarism rather than of refinement; and that part of the sentence of the murderer, which directs his body to be anatomised, has been frequently contemplated with greater horror than that which consigns him to the executioner. I am a bachelor, equivocating, as the ladies say, between youth and age. For these last five years I have been in a state of health that excites the apprehension of my friends, and I have had certain intimations that it is time to make a will. It is completed: my soul belongs to its Creator—my body I bequeath to a public hospital. Half a dozen examples of this kind, more particularly if a medical man of eminence would take the lead, would soon supply the dissecting room with subjects, and the generous independence of the bequest would still secure for the mortal part of the deceased a direct burial, instead of corrupting, as it now does, the atmosphere of the house, where the pride and ostentation, and not unfrequently the mistaken piety, of the survivors, detain it.

I am, Sir,
Your obedient servant,
MORIBUND.

Lincoln's-Inn-Fields,
In sight of Surgeon's Hall.

BY-LAWS OF THE COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—As the College of Physicians has at length condescended to inform its Licentiates, what is the nature of those laws by which they are bound, and by the infringement of which they expose themselves to penalty; I trust you will allow me to address to you a few lines on these extraordinary enactments. I am convinced that you will the more readily give insertion to these observations, as I see the hireling scribblers of the College, are already at work in their vindication, and, as the disabilities and penalties which these by-laws for the first time disclose, affect a large and very respectable body of the medical profession. First, Sir, let me address a few words to you on the fact of the publication, which I attribute, as I am sure every other disinterested person does, to the vile motive of fear. The wrongs of a great profession are now loudly proclaimed, and listened to with enthusiastic sympathy by the public. This mighty empire is rising with indignation, and ready to confound in one universal sentence of ruin, all corporate privileges and monopolies. But, Sir, I fear that another and a worse motive has suggested this step to the college. That body is now engaged in a great cause, in which its privileges must be tried against the rights of a very respectable physician, and against the good and advantage of the whole community. Has it not been hinted to their president, by counsel, that this act would enable them to enter a court of law with greater advantage, and that the withholding it would furnish their antagonist with powerful arguments against them?

But the publication is deficient, in the only statement which could give it value in the eyes of the licentiates. I find no assurance that these by-laws, are all the by-laws relating to the licentiates, and that they will not be altered or added to, without publicity. Such an assurance was necessary, and without it this act of the college is one of mere mockery. It is a notorious fact that the college has, in repeated instances, availed itself of the secresy of its by-laws, for the purpose of oppressing its opponents; nay, has even used this secrecy in a court of law (see the case of Dr. Stanger) and yet we are even desired to believe that this garbled (for I do not hesitate to assert my belief that it is not complete) statement, is a manifestation of its "disposition to comply with the reasonable wishes of the profession."

I am at a loss to conceive, by what process of insanity it is possible to defend the infliction of penalties by a corporation on persons who do not receive any protection from that corporation, and who do not participate in any of its advantages or privileges. That the profession and the public are not protected by the College of Physicians is evident, from the great number of those persons who pursue, with the most unblushing effrontery, a trade of deceit and fraud in every corner of this great city. Yet it is a singular circumstance, that the reason assigned in its charter for the institution of this college, is the destruction of Quacks and Pretenders. I hear that the Fellows of the College generally state, that such creatures are unworthy of their notice. How does it happen, then, that they are so very sensitive to the inroads of these persons, who are to be found only in the same station, in the pursuit of the same guineas, with themselves? Is it not quite plain, that if a foreign or a Scotch graduate, will be satisfied with the inferior walks of practice, he may journey on through life unmolested by the college? But let him not venture to take a guinea of a lord, or let him arm himself with the resolution of Dr. Harrison, to meet the College of Physicians in a court of law, assisted by the special pleading of an eminent barrister, the astuteness of English law, the leaning of our courts to existing institutions, and the unblushing faithlessness of a corporation.

But, Sir, is it not a strange proceeding, and worthy of all admiration, that, in the nineteenth century, the Royal College of Physicians of London, the refuge of aristocratic pride, and assumed sanctuary of purity of morals and good breeding, should gravely publish to the world two regulations for its members, in which it forbids them to quarrel in their consultations, and to participate in the gains of the drugs they order from the apothecary. This, Sir, is not all, for, O monstrous! a fine of a few shillings is attached to the latter offence, which would be visited by the Corporation of Shoemakers with expulsion!

Many other observations might be made on these most scandalous by-laws, which it would be well for the College of Physicians, had they yet slept in their charter chest; such observations will doubtless occur to all readers. I will only add to this a remark or two on the gentlemen who have been elected into the body of Fellows. I think they are three in number. Dr. Babington owes his elevation to that high character he has so long held in his profession. The election of the two other gentlemen proves, that the College of Physicians is not unmindful of its old policy of securing to itself power and patronage above all things;

and the omission of many other names of greater celebrity, shows that it has "no disposition to comply with the reasonable wishes of the Profession."

One of those despised persons,
AN APOTHECARY'S APPRENTICE.

RUPTURE OF THE VENA CAVA INFERIOR.

To the Editor of THE LANCET.

SIR,—If you deem the undermentioned case of rupture of the vena cava inferior, worthy of insertion in your valuable Journal, you will much oblige

Your constant reader,
W. H. MERRY.

Kentishtown, March 31, 1828.

I was sent for to J. B., who I understood had fallen down in a fit; on my arrival I found him extended on the floor in a state of insensibility. I immediately employed the usual means, bleeding, the administration of brandy, and other stimulants, but without the least effect.

The body was examined 24 hours after death, in presence of two eminent surgeons of Kensington: the appearances which presented themselves were the following. On opening the thorax the right lung was found adhering firmly to the pleura, the heart perfectly healthy in structure, and of the natural size.

On the abdominal viscera being exposed, the liver was found much enlarged and indurated, a large quantity of coagulated blood in the cavity of the abdomen; upon minute examination the vena cava inferior was found extensively ruptured, in the situation of the fourth lumbar vertebra just before the vein terminates by dividing into two iliac veins, the coats were rather thinner than usual at the part that was ruptured, but there was no appearance of ulceration; the only symptom he complained of previous to the accident, was a pain in the right side. The subject of this accident was a robust young man, 24 years of age.

SIR ASTLEY COOPER AND THE CERTIFICATE TRADE.

To the Editor of THE LANCET.

SIR,—After serving an apprenticeship in the north of England, I repaired to London, last September, to finish my education. My master had been a pupil at the united Hospitals of St. Thomas and Guy; but he doubted whether either of the disunited schools would possess the advantages of the former single one, and recommended me not to put down the money, till I had made some inquiries. I addressed myself to one of the official persons who are appointed to receive the cash; and when I hesitated in *coming down*, on account of the retirement of Sir Astley, he said, "O, my dear Sir, you are quite mistaken, we have not lost Sir Astley, he is consulting surgeon; he comes to see difficult cases; you will hear his opinions, and see his practice; he is often at the hospital." With the characteristic caution of the north, I still hesitated on the important point of payment. But I found, on further inquiry, that Sir Astley signed the certificates of attendance, and this finished my scruples; for I concluded, that unless he attended the hospital himself, he could not tell whether the pupils attended or not. Now, Sir, I have attended closely, and have not yet had an opportunity of seeing Sir Astley; but I have been comforted by the assurance, that he will sign my certificate all the same. I thought the person who told me this, first showed his assurance, but I now find that it is correct. As this great surgeon is President of the College of Surgeons, and as the Council of the College depend more on certificates, for very weighty reasons, than on other proofs of knowledge, it will be interesting to the profession, and to the community, to know how its members, who are the wholesale dealers in the certificate market, proceed in getting up this valuable article, for which there is always a great demand. I will, therefore, recommend you, when your trial comes on with Mr. B. Cooper, to endeavour, by the examination of Mr. Harrison, or the worthy Baronet, to set this business in a clear light. I need not presume to suggest to you, what questions would be proper; but I should ask Sir Astley, whether any, and what, duty was intrusted to him, when he accepted the post of consulting surgeon to Guy's? whether he has been at the hospital as consulting surgeon, and given his opinion on cases twelve times in the last twelve months? whether he has been six times? whether he has been consulted in twenty-four cases in the year? or in twelve? How many certificates he has signed in the last year? whether he has known that any one of the pupils, whose certificate he has signed, has really attended? what difference he considers there is, between testifying in writing his personal knowledge of a fact, about which he is utterly ignorant; and asserting, in conversation, that a thing has happened, when he does not know whether

it has happened or not? whether there is any other difference between these two things, than between writing and speaking a lie?

I suppose, Mr. Editor, that the prejudices of education may make me view these matters too strictly. I cannot understand how the College of Surgeons can recognise the certificates of Sir A. Cooper, who writes them without knowing whether people have attended or not; and yet refuse to recognise those of a country hospital surgeon, who attends regularly, and knows all his pupils personally; or those of M. Dupuytren, who goes round his great hospital every day. Surely, Sir, the President of the College would not do such things without a good reason. Surely Mr. Harrison, who is known to be a very moral and strictly religious character, and the honourable Governors of Guy's, would not allow this certificate traffic without a good purpose—they would not think of using Sir Astley's name as a decoy.

The example of great men soon influences those below them, and that of Sir Astley has not been lost on my brother pupils. For many of them have signed a certificate about Mr. B. Cooper's operation, yet were not present at it, and *admit the truth* of your report, although they have publicly attested its falsehood. And you saw lately, how five wise men followed Sir Astley through the mud in a court of justice, speaking about facts which they knew nothing of, as boldly as if they had seen them; that this new method of certifying and testifying is not yet generally admitted, appears from the verdict in that cause.

Yours, with much respect and gratitude,

ALUMNUS GUYENSIS,

A spectator of Mr. B. Cooper's operation, but not a signer of the exculpatory letter.

Maze Pond, April 5, 1828.

ST. THOMAS'S AND GUY'S HOSPITALS.

GUY'S HOSPITAL.

CASE OF DISLOCATION OF THE HUMERUS, REDUCED AT THE EXPIRATION OF FIVE WEEKS AFTER THE INJURY.

A STOUT man, 60 years of age, was admitted into the Hospital on Tuesday noon, April 8th, having received severe injury to the shoulder joint, five weeks previously.

According to the patient's statement, he slipped down whilst walking, and fell upon his shoulder: he applied to a surgeon(!) who informed him that the injury was only a sprain, and prescribed liniments; but finding that he was incapacitated from using his arm at the expiration of five weeks, he applied to the Hospital.

When admitted, it was readily discovered upon examination that the humerus had suffered dislocation downwards and forwards—the head of the bone being thrown beneath the pectoral muscle. The characteristic signs of the injury were very palpable—the elbow, separated from the side, and slightly inclined backward—the prominence beneath the pectoral muscle, &c.

Tartar emetic was exhibited ad nauseam, and the pulleys were then employed, until the head of the bone was drawn below the level of the coracoid process, when the surgeon, Mr. Cooper, put his foot in the axilla, at the same time carrying the humerus forwards; by these means the reduction was effected in the space of fifteen minutes.

There has been no operation performed at this Hospital during the last fortnight; notice was given of an operation last Tuesday week, but the patient it was understood had become so alarmed at recent occurrences, that he had decamped, and by way of mending matters, had gone over to St. Thomas's Hospital, under the care of Mr. Travers.

ST. THOMAS'S HOSPITAL.

CASE OF DISLOCATION OF THE FEMUR UPWARDS, REDUCED AT THE EXPIRATION OF SIXTEEN DAYS.

A stout muscular Irishman applied to the Hospital for relief on Sunday, March 23, having received an injury to the hip joint sixteen days previously. The accident occurred in the country, from a wagon having fallen upon him; he was unable to stand or walk after the injury, and great tumefaction speedily ensued. It was discovered, two days before the man's admission, that the femur was dislocated upwards, and attempts were made to effect the reduction, but without success.

When the patient was admitted, and stripped for the purpose of examination, the nature of the injury was so very apparent, that it was at once decided that the femur was dislocated upwards on the dorsum of the ilium.

Tartar emetic was administered in repeated doses, until nausea was produced, and blood-letting was employed to the amount of thirty ounces; under the state of depression induced by these means, the pulleys were used, and it was not until after extension had been employed for more than an hour, that the reduction of the bone was accomplished.

The case was exclusively managed by the dresser of the week, Mr. Bean.

THE LANCET.

London, Saturday, April 12, 1828.

PETITIONS, praying for the removal of the obstacles which impede the acquisition of anatomical knowledge, have been forwarded for presentation to the Legislature, from members of the profession, assembled at public meetings* at Manchester, Liverpool, Leeds, and other towns. A petition to the same effect is also now lying for signature at the rooms of the Westminster Medical Society. We regret that the provincial practitioners have not availed themselves of this opportunity of praying for a reform of the abuses in the College of Surgeons, which abuses present, in fact, the greatest obstacle to the acquisition of the science of anatomy, since, by the regulations of that corrupt and benighted body, the provincial schools of anatomy are not recognised.

ANOTHER impotent attempt has been made by the three ninnyhammers of St. Thomas's Hospital, to suppress the publication of Hospital reports, by the exclusion of a gentleman whom they suppose to be the writer of the report of Mr. BRANSBY COOPER's case of lithotomy. We have but one word to say at present, by way of notice of this attempt, and that shall be an interjectional one, used under circumstances not very dissimilar, by a facetious contemporary, *Poh! Poh! Poh!* We refer our readers, however, to an able and spirited communication on this subject by a correspondent, who has this week addressed us under the signature of MORAGER. Another letter, also well deserving of perusal, on the subject of the certificate trade carried on at the Borough Hospitals, will be found in this week's number.

* A meeting of Mr. Grainger's pupils is advertised for Thursday next, at one o'clock.

MR. BRANSBY COOPER has addressed a letter to Roderick Macleod, which certainly is not calculated to diminish the impression that he is indebted for the situation which he holds at Guy's Hospital, rather to the relation in which he stands to Sir ASTLEY COOPER, than to his intellectual pre-eminence. The latter consists only of a single sentence, but that sentence is *nonsense*. Here it is.

SIR,—In consequence of the foul misrepresentation of my late case of lithotomy, at Guy's Hospital, it had been my intention, originally, to transmit to you the details of that operation for your columns; but as I have since been strongly recommended by my friends to seek redress for this injury *elsewhere*, I forbear to anticipate any part of my own case until the full particulars shall be made public in a court of justice.

I am, Sir,

Your obedient Servant,

BRANSBY B. COOPER.

April 1, 1828.

The well-wishers of Mr. BRANSBY COOPER will probably regret that he did not submit his sentence to a little friendly revision, before rashly committing it to the press; for it cannot be denied that this gentleman's diction savours strongly of the mental confusion, which he seems to have betrayed during the late melancholy exhibition at Guy's Hospital. The first moiety of Mr. BRANSBY COOPER's sentence is somewhat perplexing, since the pluaquam-perfect propriety of its grammatical construction seems to intimate that he was moved by the alleged misrepresentation of his recent case of lithotomy, to transmit the details of it to Roderick Macleod, at a period *antecedent* to the performance of the operation. But the concluding moiety of Mr. BRANSBY COOPER's sentence, casts the merit of the first portion of it completely into the shade. Mr. BRANSBY COOPER, it seems, forbears to *anticipate* any part of his own case, *until*—*until* what period, gentle

reader? Why, until the full particulars shall be made public in a court of justice. Argal, Mr. Bransby Cooper will be ready to *anticipate* his case, when the public are in possession of the *full particulars*. Of a truth, looking to the brevity of this epistle, and seeing that brevity is the soul of wit, it is, perhaps, as witty a specimen of composition, as ever emanated from the intellect of a pure Hospital surgeon. It is redolent of the spirit which characterises the productions of the *Bat* tribe; it is inspired by the soul and genius of *Dogberry*:

Dogberry. Bring my pen and inkhorn.

Verges. We must do it wisely.

Dogberry. We will spare for no wit, I warrant you; here's *that* shall drive them to a non-com.

Mr. Bransby Cooper will not *anticipate* his case, until the full particulars of it shall be made public in a court of justice! Truly, a most cautious resolution! and when the full particulars of it shall be made public in a court of justice, he is determined to commence his anticipations. And the writer of this epistle, seeing that he is a *pure* hospital surgeon, we must, per force, believe to be one of the heads and ornaments of his profession! Doubt this, ye general practitioners, and you will be held up to public scorn, as "the chaff and bran" of your profession! Doubt this, ye general practitioners, and your incredulity will be stigmatised as presumptuous contumacy towards the Traverses, the Stanleys, and the Simons, of the age! Doubt this, ye despised and degraded members of a "subordinate department of the profession," and you will incur the awful resentment of that galaxy of surgical genius, whose paths are paths of purity, and whose perfections it is treason to your liege masters to call in question!

We are far, however, from wishing to draw any inferences unfavourable to Mr. Bransby Cooper's surgical skill, from the mere fact of his apparent inability to write a single sentence, in which he can accurately convey his meaning to the public. This letter or sentence may, undoubtedly, operate more disadvantageously to Mr. Bransby Cooper, than it ought in fairness to do; and we regret, for his own sake, as well as upon public grounds, that the only explanation he intends for the present to give, of the extraordinary circumstances attending his late operation, and the only means which he affords the public of forming a judgment of his ability, are those which he has furnished in this singularly infelicitous specimen of his literary accomplishments. Why, we should be glad to know *distinctly*, does Mr. Bransby Cooper postpone publishing his own account of the details of the late operation? Why does he delay satisfying the public mind, that the extraordinary circumstances attending the late operation were occasioned by the extraordinary difficulties of the case! Why does he defer, to a distant period, the discharge of a duty, which he owes to himself, to the profession, and to the public,—that of showing, that he is competent to hold a situation, in which the health and lives of the objects of a charitable institution depend upon his competency? Does he imagine that the public will be satisfied with the reason which he assigns for his silence in this letter—a letter which, brief as it is, furnishes no slight evidence of mental confusion, and which is itself calculated to increase the public doubts and misgivings, as to the talents of the writer? Does he imagine that the public will be satisfied with being told, that he forbears *anticipating* his case, *because* he has been recommended by his friends to seek redress for the injury elsewhere? *Redress for the injury*! What proof is there before the public, that Mr. Bransby Cooper has a right to complain of injury? who, we should be glad to know, according to the *primâ facie* evidence before the public, is the party injured? Is it Mr. Bransby

Cooper, who, according to that *primâ facie* evidence, has received injury, or the public, who expect, and, if necessary, have a right to insist, that the disposal of Hospital Surgeoncies shall in no case be made a matter of family jobbing, corrupt influence, and intrigue? We do not say that the extraordinary circumstances attending the late operation are not capable of explanation, if extraordinary difficulties can be shown to have existed; but we do not hesitate to affirm, that, in the absence of all proof of such difficulties, those circumstances present a strong *primâ facie* case against Mr. Bransby Cooper. Not a single material fact in our report, be it remembered, has been contradicted. The profession and the public have no reason to doubt, therefore, that at the end of fifty-five minutes, after employing a multiplicity of different instruments, Mr. Bransby Cooper performed an operation, which is usually accomplished by skilful surgeons in five or six minutes. The profession and the public have no reason to doubt, that after this performance of the operation, the patient died. Lastly, the profession and the public have no reason to doubt the accuracy of our report of the *post-mortem* examination, for the accuracy of this report has not been denied; and let it be observed, that if any extraordinary difficulties had existed in this case, such difficulties would have been demonstrated by the *post-mortem* examination. Let us see, then, what is the question at issue, and what is the evidence, as it stands at present, on each side of that question. The question is, as we stated last week, whether the operation lasted nearly one hour, in consequence of extraordinary difficulties, which baffled the skill of an unexceptionable operator, during a period tenfold as long as that commonly employed; or, whether the operation lasted nearly one hour, because it was the turn of a surgeon to operate, who has obtained his situation, not in consequence of any pre-eminent ability he has displayed, but in consequence of his connexion with Sir Astley Cooper. The *primâ facie* evidence on the one side of this question, consists of the facts to which we have above adverted, not one of which has been, or can be, truly contradicted; the *primâ facie* evidence, on the other side, consists partly of a general denial of the accuracy of our report, by Mr. Bransby Cooper's pupils, more than one-third of whom did not witness the operation, and partly of the letter or sentence of Mr. Bransby Cooper himself, which we have just laid before our readers.

But it may be said, and it is in fact unblushingly avowed by the Bats and Corruptionists, that if Mr. Bransby Cooper were now to publish his own account of the details of the late operation, such a publication, however imperiously called for by justice, humanity, and general expediency, would materially diminish, and in all probability entirely defeat, his chance of obtaining a verdict in the action which he has commenced against The Lancet. Does Mr. Bransby Cooper imagine, that this will be deemed by the public a satisfactory reason for withholding all explanation at a time when explanation is most called for? The mistake which this gentleman commits, in common with other surgeons, to whose failures publicity has been given through the medium of an independent medical press, consists in an extravagant estimate of his own consequence, as compared with the safety of hospital patients, and the right which the public has to know, that the duties of hospital functionaries are adequately discharged. Comment on the failures of these hospital functionaries is instantly denounced by the unsuccessful operators as libellous, and to criticise their blunders is, in their view of the matter, little short of an invasion of a supposed vested right to commit blunders with impunity. Not a syllable ever escapes the "Hole and Corner" surgeons, which indicates compassion for the patients, who may be destroyed by their un-

skilfulness, or respect for the public, who have a right to be assured of their competency. Full of wrath and bitterness against the publishers of their failures, they reserve all their tenderness and compassion for themselves. The morality which they, in their benevolence, inculcate, is, that the ignorant operator is the true object of sympathy; the law which they, in their righteousness, would fain persuade a jury of their countrymen to sanction is, that he who ventures to expose official ignorance, is a fit object for punishment. It is right that Mr. Bransby Cooper should understand, that the question to which his recent exhibition has given rise, is no more a question between him and The Lancet, than it is a question between him and the young gentlemen who gratuitously bore testimony to his surgical ability, and volunteered their approbation of an operation which they did not witness. The public care not two straws whether, by withholding an immediate explanation, Mr. Bransby Cooper may be in a better, or in a worse condition to obtain a verdict at a future period against this Journal. The only question in which the public are interested, is, whether Mr. Bransby Cooper is, or is not competent to discharge the duties of a hospital surgeon; and as the withholding of all explanation, under the extraordinary circumstances attending the late operation, renders that question doubtful, the public have a right to expect, that if this gentleman "forbears to anticipate his case," he will also forbear to operate on the hospital patients.

As to the insinuation of a feeble contemporary, that we have been influenced by "private malice" against Mr. Bransby Cooper, in giving publicity to his failure, we shall merely observe, that it is as ridiculous as it is false. For Mr. Bransby Cooper, in all the relations of private life, we entertain the greatest respect and esteem; but for his talents as a surgeon, we do not entertain much veneration.

Private malice? Bah! As journalists, we know nothing of Mr. Bransby Cooper but in his public capacity, and it is by his conduct in that capacity that Mr. Bransby Cooper must stand or fall in the judgment of the profession and of the public. It is the fearless uncompromising independence of this Journal, which is the real source of our strength, and the true cause of the hatred which is felt towards us by the ignorant and the corrupt. We disclaim all animosities or predilections with respect to individuals; our praise has been spontaneously bestowed upon talent and integrity, and our hostility honestly directed against ignorance, corruption, and false pretension. A patient on whom Mr. Lawrence operated for stone, died last week at St. Bartholomew's Hospital, and Roderick Macleod "*ventures* to say, that if we speak of this case at all, we shall speak of it in a very different tone from that which is adopted with regard to Mr. Bransby Cooper!" "Nothing *venture*, nothing have," says the proverb, and we presume it was not without some previous calculation, founded upon the doctrine of chances, that the Scotch *Dub* resolved to try how far he might mislead the public, and at the same time cast an imputation on the character of The Lancet. Let us see what Roderick accomplishes by the experiment; let us see what the Yellow Goth, armed with the triple armour of brass, brimstone, and a Scotch diploma, takes by his *venture*. The object of Roderick, in the passage to which we have adverted, is to produce an impression that we should either take no notice at all of Mr. Lawrence's unsuccessful case of lithotomy, out of partiality to that gentleman, or that, if we noticed it, we should speak of it in a different tone from that which has been adopted with regard to Mr. Bransby Cooper; not because there was any real difference in the two cases, but because we are desirous of softening and explaining away the *errors* of Mr. Lawrence, and of exaggerating and inflaming

those of Mr. Bransby Cooper. Now the only answer we will give to Roderick's insinuation, shall be by contrasting the facts presented by Mr. Lawrence's case, according to Roderick's own report of it, with the facts presented by the case of Mr. Bransby Cooper. In Mr. Bransby Cooper's case, the stone was extracted at the end of fifty-five minutes, after a great variety of different instruments had been employed, the patient's sufferings being apparently uninterrmitted during the whole of this protracted period, being tenfold that usually employed.

The following is Roderick's own account of Mr. Lawrence's unsuccessful case :—

"*Lithotomy.*

On Monday, March 24, Mr. Lawrence performed this operation upon a young man about twenty years old, who has been affected with this complaint for some years. The prostate gland was rather thickened and hard; and the existence of a fistula rendered the neighbouring parts more difficult to divide than usual, and occasioned a good deal of hæmorrhage. The operation was performed with a common curved staff; and a double-edged scalpel was plunged in towards the groove of that instrument, and brought out about three inches below the point of its insertion: a beaked knife was then employed, to make a passage to the bladder; and the stone, which was about as large as a pigeon's egg, readily extracted: it appeared to be a compound of triple phosphate and the mulberry calculus. The patient is, at present, going on well."

In Mr. Bransby Cooper's case, the patient was removed from the operating theatre, without any hope of a favourable issue, and his sufferings were speedily terminated by death.

The following is Roderick's own account of the termination of Mr. Lawrence's case :—

"The patient whom we mentioned last week to have been operated on by Mr. Lawrence, died on Sunday, *eight days after the operation*. He was going on apparently well: he had begun to pass urine through the urethra, and the wound had a favourable aspect, when, on Saturday night, it was discovered that he was bleeding. The house-surgeon being sent for, removed a quantity of coagula from the wound and from the bladder, and succeeded, by pressure, in stopping the hæmorrhage; but, in spite of all attempts to support him, he gradually sunk, and died the next morning. His body was removed by his friends, before any examination could take place.

The quantity of blood lost was not very considerable; scarcely enough, we should have thought, to have destroyed the patient; but it appears that he had an impression that the operation would be fatal to him," &c.

And then follows some twaddle about "the forebodings of a weak, perhaps, diseased intellect," not material to the case.

We leave Roderick Macleod to the enjoyment of all the benefit he can derive from the success of his *venture*. But there is one part of Roderick's conduct, with respect to Mr. Bransby Cooper's case, which, with a view to the future dispensation of even-handed justice, is, at the present moment, well worthy of notice. Roderick declares that he has "*particular reasons, altogether unconnected with the case itself*, for declining, at present, to publish any report of his own;" and, in another part of his "Excrescence," he states that he abstains from motives of *prudence*, from giving any details of Mr. Bransby Cooper's case." All this is sufficiently indicative of another attempt to *get up* a case, *per fas et nefas* against The Lancet. In fact, we know that the machinery of the Bats and Corruptionists is already at work for this purpose, and it may, perhaps, be a fortunate circumstance for the sake of truth and justice and humanity, that the Number of this Journal, containing the report of Mr. Bransby Cooper's case, is also the Number which contains demonstrative evidence of a foul but unsuccessful attempt to obtain an unjust verdict against The Lancet, by suppressing the testimony of a competent and honourable witness.

Our readers will collect from the foregoing observations, that, notwithstanding the *death* of that portion of Macleod's "Excrescence" intended for provincial circulation, the thing

still exists; it has, however, all the symptoms of decay.

For when the date of Nock is out,
Off drops the sympathetic snout.

We shall select from the last Number of the Excrescence, one wilful falsehood, and one specimen of erudition:—

"In the case of Mr. Bransby Cooper (says Roderick,) there is another circumstance of peculiar aggravation; we allude to the manner in which it has been noticed in the public papers. This was not accidental, for it appeared the very morning of publication: it was a wilful aggravation of injury, and a refinement of malice."

If the writer of this passage believed what he here insinuates, namely, that the leading paragraph in *The Times*, noticing Mr. Bransby Cooper's case, was written, or caused to be inserted by us, he would merely be a contemptible blockhead, as incapable of appreciating the character of *The Times* Journal, as he is of estimating our own. But the writer knew that to be false, which he here asserts, namely, that the paragraph in *The Times* appeared on the morning of the publication of the report; for he knew that the paragraph appeared in *The Times* on Saturday, and that *The Lancet* is invariably published, in point of fact, though not nominally, on Friday.

So much for the wilful falsehood: the specimen of erudition is found in the following quotation, which Roderick thinks applicable to us, after declaring that he once entertained a hope that "his own little bow-wows" would effect a change in the tone of The Lancet, and confessing that he now finds it to be a hopeless case.

"Quem Deus vult perdere prius dementit."

This is a stroke of slip-slop scholarship, after the fashion of Jamie Johnstone's "*Tempora mutantur*," "*nemo contentus*," "*vox et præterea nihil*," "*ultra ancurimum*," "*ambo retentare parati*," &c. It is, however, Roderick's first attempt at a quotation, and if the application of The Lancet produce the same effect upon his classical, as upon his poetical *ventures*, it will be his last. By the by, we regret having deprived ourselves of a source of amusement, by snuffing out Roderick's poetical existence with a single article, as one Josiah Huggins was pronounced in a late Number of our favourite periodical, *The Evangelical*, to have been cured of scrofulous legs and atheistical principles, *under* one sermon. Be of good cheer, Roderick, and try thy hand at poetry again! What though thou mistookest a Greek poem on astronomy for an anatomical treatise, thy verse was nevertheless as good as thy prose, and not worse than some of thy prescriptions! Be not discountenanced, Yellow Goth! and peradventure thou mayest improve. Resume, O medical Melibœus, thy oaten pipe; solace thyself with pastoral and sulphur; but meddle not with a language of which thou knowest as little as thy patients know of the composition of the *pilulæ è mică panis*, which thou art wont, with so much wit and honesty, to prescribe for them!

Notes on the Epidemic Cholera. By R. H. Kennedy, M.D., &c. Surgeon, Bombay Presidency. Calcutta, 1827. Thacker and Co. pp. 277.

No disease of late years has excited more attention, than that dreadful scourge of mankind—the Cholera of the East. So rapidly destructive, indeed, has been its progress; so widely devastating its career, that it has literally passed on like a flood, sweeping all before it; depopulating cities and annihilating armies, and realizing to us, in modern times, those horrible pestilencies which prevailed in days of yore. The subject has become highly important in a national as well as in a professional point of view, for so fatal in its results has been the disease in question, that our very political existence in India has been threatened by this fell malady:—we turn, there-

fore, to the book under review, written by a resident medical officer, in full expectation of eliciting valuable practical information, on a question involving the fate of thousands.

The author, in his introductory remarks, draws a melancholy picture of the consequences resulting from the native theory of *fatalism*, by which all precautionary measures are regarded as a presumptuous struggle against the Deity, and the inhabitants thus abandon themselves to propitiating by sacrifice, or soothing by prayer, the demon of pestilence. But there is also practised, according to the author, the most debasing and disgusting superstitious rites, "rather as magical incantation than as the spirit of devotion." It is here remarked:

"To refer to the particulars of these demoniacal proceedings would be to weary my readers with offensive details; but I cannot pass over, as a singular coincidence with the Mosaic institution of the scape-goat,* directed to be let loose into the wilderness, loaded with the curse of the sins of the congregation, the similar ceremony practised in some places here, of dedicating a buffalo to the spirit of the plague, and turning it loose into the woods. Wherever the poor brute directed its course, the population rose in a body to drive it back into the forests. It was not only supposed to be accursed, and bearing the curse and punishment for the people, but the pestilence was expected whenever it was seen; nor was the district relieved from alarm until the devoted beast had been destroyed by tigers, or sank exhausted under the pitiless persecution which goaded it from village to village."

The book is arranged into nine chapters, which division being convenient, we shall preserve it in the subsequent analysis.

Chap. I. *History of the disease, as it appeared under the author's observation.*—From the year 1818 to 1826, Dr. Kennedy had various opportunities of witnessing the disease in question, in all the forms it assumes; the first occasion was in the city of Surat, a densely populous city, situated in a remarkably level country. The epidemic, it seems, had commenced about a hundred miles N. E. of Calcutta, in August 1817; and having traversed the peninsula from east to west, directly in the face of the periodical winds, which are westerly, it reached the Bombay coast in one year. Thence it pursued a westward course, at length reaching a fortress situated 150 miles from Surat; from this garrison some prisoners of war were brought to Surat, and to the arrival of them was imputed the introduction of the disease. The author, however, subsequently states that he witnessed the disease, as far as could be ascertained, arising sporadically, and singularly enough affecting one battalion *only*, although the most unrestrained intercourse existed between the infected and two other battalions.

Chap. II. *Theories respecting epidemic cholera.*—The author first notices the report of the Medical Board of Calcutta, in 1818, in which an opinion is stated that the epidemic cholera is a visceral disorder, and that the symptoms of cerebral affection are but occasional and secondary. In the history of the post-mortem examination it was observed in the report.

"The brain was generally of a natural appearance. In one or two instances, lymph was effused between its membranes, near the coronal suture, so as to cause extensive adhesions. In other cases, the sinuses and the veins leading to them, were stuffed with very dark blood."

Our author combats this officially delivered opinion, contending, on the authority of Pott and Bell, that disease of the brain may be very clearly evidenced by the symptoms existing during life, and yet a post-mortem examination fail in showing any organic lesion. However, in the two first inspections which Dr. Kennedy himself made, he found a turgid state of all the blood-

* See Mead on Plague, for a singular account of a human sacrifice under similar circumstances, and a most curious and learned note respecting it.—Dr. Mead's Works, 4to. 1762. p. 245.

vessels of the brain, and "specks of blood started up under the scalpel," in cutting through the substance of the brain: such were the appearances found in all his subsequent researches. The observations of Mr. Crew and of Mr. Gordon, in respect to the morbid appearances of the brain, are quoted in confirmation of the author's statement; both of these gentlemen, it seems, were strenuous advocates for blood-letting.

The author thus states his own opinion:—

"I consider concussion of the brain to be the disease, how induced I know not, following the above inexplicable shock sustained by the constitution; and the collapse and spasms to be symptomatic of the disorder of the brain; and finally, I consider the purging and vomiting to be no part of the disease, but the struggle and effort of nature to relieve the constitution, and cast off the noxious principle which is destroying it. For the treatment of such a disease, the indication is distinctly apparent to relieve the brain by bleeding, and to induce the sanitary process of vomiting and purging where they do not exist, or to moderate them when violent. Into these brief injunctions may be resolved all that has been written on respectable authority; and the only difference in my theory is, that I would propose a regular systematic procedure, in preference to the uncertainty, hesitation, and undecidedness which, in spite of every thing that has yet been written, continues to prevail, in a case where of all others the patient's safety most mainly hinges on the promptitude of treatment."

Chap. III. *On the contagiousness and epidemic character of cholera.*—After professing his incredulity respecting the disease in question being "a new destruction let loose upon the land;" and, indeed, doubting whether there be any one *new* disease since the time of man's creation, the author puts this important question—"Why this disease should establish itself a permanently constantly operating scourge upon the country, instead of exhausting itself as on former occasions?"

The answer given to this (which it is admitted hazards the assertion of the contagious nature of the epidemic) is, that within the last few years, the whole of the Peninsula has become but one empire, and hence a system of unrestrained intercourse is carried on where formerly little or no communication existed.

It is not our intention here to enter fully into the consideration of the remote cause of cholera; that it prevails as an epidemic, and that too of the most destructive kind, is admitted on all hands, but the medical world is divided in respect to whether the disease arise from a peculiar noxious condition of the atmosphere, or from specific contagion. In opposition to the first opinion, we have the singular fact noticed by the author, that the disease pursued its progress from east to west, in direct opposition to the periodical winds which were blowing *from* the latter point; and that in every instance it occurs in the immediate track of human intercourse. Sir Gilbert Blane, in a letter published, in 1825, and addressed to the Directors of the East India Company, is very explicit in his opinion of the contagious nature of cholera. It must be admitted, however, that there is much doubt still attached to the subject.*

The chapter concludes with the following remark:—

"I am under the necessity of ending this part of the discussion with observing, that to the best of my judgment, I know no character belonging to any contagious disease which cholera does not appear to me to possess; and that if it be not contagious, I know no other disease which I should be inclined to consider so."

Chap. IV. *On the virulence and malignity of cholera, as compared with other epidemics.*—We have room for only one extract from this chapter.

"To ascertain, therefore, the true proportional mortality of the prevailing epidemic cholera, recourse may be had to those

* Vide vol. vi. p. 275 of this Journal, where an interesting account is given of the progress of cholera to the shores of the Mediterranean.

formidable visitations in particular corps, which form part of the subject of the preceding narrative; and the result of this inquiry gives 767 cases, and 211 deaths, amongst the European troops; and 4065 cases, with 1544 deaths, amongst the natives. We have thus the proportion of 27½ per cent. in the former, and nearly 38 in the latter, which, considering that this disease runs its fatal course very generally within twelve hours, sufficiently marks it as one of the most formidable that has ever afflicted the human race."

Chap. V. *On the concussion of the brain.*—We here arrive at the author's "hobby;" having previously stated that "concussion of the brain" is the "lethi fabricator" in cholera, (this phrase, we presume, is a *fabrication* of the writer,) and that the purging and vomiting are sanitary processes: he attempts to substantiate this doctrine by exhibiting what he terms "a series of analogous circumstances."

First, he speaks of concussion of the brain resulting from mechanical violence, and quotes the opinions of Pott, Bell and Abernethy, that great prostration of strength, vomiting, and partial stupefaction, are the characteristics of this affection, being totally distinct from those of inflammation or organic lesion, to be detected by dissection.

It is then remarked:—

"Concussion of the brain following diseases or poisons which operate upon the nervous system, cannot be expected to show itself with such clearly defined symptoms, as when it results from positive mechanical injuries; but, when those well-known characteristics are discoverable, however faintly, yet when all are present and combined, it seems natural to suppose, from their appearance, that though the causes may be different, the diseases are the same."

Two cases are next related, which are regarded by the author as "instances of commotion or concussion of the brain, produced by high nervous excitement of an epileptic character." They appear to have been cases of sudden congestion of blood in the brain, and in both instances there was the similar state of extreme collapse, which succeeds to violent injury of the body, from mechanical causes. Other cases are referred to by the author, where the "epileptic or cerebral excitement" was reduced and carried off by vomiting and purging.

It is avowedly the author's object to prove, as we before stated, that the brain is primarily affected in cholera, and he wishes to establish an analogy between that disturbance of cerebral function produced by commotion of the mass from mechanical causes, and the cerebral derangement observed in cholera. Now we are clearly of opinion that no analogy exists; the precise pathological condition of the brain, in many cases of concussion, we are unacquainted with—dissection revealing nothing; but it is not so in cholera, according to the author's own showing, for there he tells us—the vessels on the surface are highly turgid, and the substance of the brain itself is inordinately vascular. If the author had simply contended that the *first stage* of concussion, when a violent shock has been given to the body, and what is usually designated reaction, has not yet taken place, when all the vital powers are prostrate, the skin cold, and heart scarcely acting, resembles the condition of collapse in extreme cases of cholera, we should have admitted the analogy. But, we must observe, that this state of congestion is common to all extreme injuries, the patient recovering from it, without manifesting any subsequent cerebral derangement; it is not, therefore, the pale and almost lifeless condition of the patient which we regard as evidence of concussion of the brain, but a certain train of symptoms which supervene.

Chap. VI. *On the nature and character of critical discharges.*—The object of the author, in this chapter, is to show the analogous operation of nature in various critical discharges, as compared with the evacuations which constitute the secondary symptoms of cholera. The vomiting which follows long-continued syncope; the nausea which su-

perveues on the cold stage of an intermittent, and the critical melanoid discharges in fevers, are all adduced as sanative processes. At the commencement of the chapter, Dr. Kennedy takes occasion to express his belief to a certain extent in the doctrine of planetary influence on disease; he says:—

"The constitution here, both of native and denizen, is as assuredly under lunar influence, or, what is the same thing, under the influence of the changes of weather which invariably accompany the changes of the planet, as the ocean by its tides proves the subjection of its mass of waters to the conjoined sub-lunar attractions; and I wish whoever will persist in an opposite argument, could feel a very trifling proportion of what I have felt in corporal suffering from fever, and I am convinced he would consider it a pang sufficiently great to be remembered, to the uttermost limit of his threescore years and ten."

It is, perhaps, scarcely necessary to observe, that the ancients were much disposed to rely on planetary influence, that the doctrine of medical astrology, however, became abandoned until the time of Mead, who supported it with great learning, and hence again gave an impulse to the belief. The great Darwin subsequently advocated the opinion, and drew attention to it, when it was drooping; and Dr. Balfour has still more recently adduced it as a doctrine capable of direct proof; affirming, that the influence of the sun and moon, when in a state of conjunction, produces paroxyms or exacerbations in continued fever, and that as these luminaries separate, crises take place.

Chap. VII. *On the nosological application of cholera.*—The whole that can be gleaned in this chapter, is the opinion of the author, that the cholera of Celsus is the same disease as the epidemic cholera of the present day. In respect to the objection which has been taken to this opinion, from its being supposed that the Greek and Latin physicians indicated by the term cholera, an overflow of the hepatic secretion, which is by no means a characteristic of the Indian epidemic, Dr. Kennedy argues, that the word is not derived from χολη, bile, and ρεω, to flow, but rather from χολας, intestinum, meaning, thereby, that the matter discharged is excerned by the intestines rather than the liver.

Chap. VIII. *On the varieties and anomalies which appear in cholera, and on the Cholera Spontanea of Cullen.*—In this chapter are considered the varieties and anomalies which present themselves in the appearances and forms of the disease. The author considers the supposed varieties are referrible to distinct *stages* of the same complaint.

Chap. IX. *On Epidemic Cholera.*—We here arrive at a statement of the author's personal experience in the disease under consideration. He states that the milder forms of cholera are nearly always ushered in by marked cerebral disturbance, the patient being in a state of partial stupefaction. The following is given as a description of the first stage of the disease in its worst form.

"The patient has an appearance altogether different from apoplexy, but very much resembling epilepsy in its worst forms. The collapse is as perfectly formed as in those cases where it seems to be accounted for by the prodigious quantity that has been discharged; the pulse is scarcely, if at all, perceptible at the wrist, and the unnatural cold perspiration attends the accession of the fit: finally, if the paroxysm be established in its most aggravated character, it is accompanied with rigors and trismus, and it is scarcely possible to administer medicine; what is forced into the mouth is instantly impelled forth from the nostrils; and if the nostrils be held, there results an imminent risk of suffocation, from the liquids entering the lungs through the larynx. The patient seems death-struck, and unless relieved by phlebotomy, soon expires, without there appearing the least reaction, or any sanitary process of the constitution whatever."

If the patient survive this state of extreme collapse, then the *second* stage supervenes, characterised by vomiting and purging; and, to this succeeds a third stage, "the febri-

cula of Celsus." The indication in the first stage, says the author, is "to bring on the sanitary processes of the constitution;" and with this view he recommends blood-letting, emetics, and cathartics; at the same time, he observes, that the surgeon is seldom called to the patient until vomiting and purging (the second stage) have commenced.

Dr. Kennedy objects to the use of the warm bath in the stage of collapse*; he recommends friction with oil, in which a little wax has been dissolved, with a small quantity of camphor and opium, and he considers this unguent to have an effect in checking the colliquative cold sweat.

In the second stage, we are informed, that "the indication is, to moderate the inordinate action, and to endeavour to check the unnatural secretions of the bowels, by inducing their healthy and usual evacuations," at the same time keeping in view the necessity of supporting the constitution. The remedial measures to be adopted in order to fulfil these intentions, are, the abstraction of blood in reference to the strength of the patient, and the administration of castor oil with laudanum; a blister applied to the scrobiculus cordis, camphor and opium to allay spasms, and, finally, *exciting*, but not *intoxicating* or *acrid* stimulants.

In respect to blood-letting in the second stage, the author has the following observations:—

"In my hospital practice, I have never made the pulse at the wrist the criterion for bleeding; but the question of its necessity has depended on whether the vomiting and purging have been of long continuance, and accompanied with copious evacuation; for where such is the case, a real and positive exhaustion of vital powers is induced, totally independent of the apparent debility of the collapse; respecting which there is no necessity of stopping to argue that it is not actual weakness, but a symptomatic syncope of the animal powers."

As regards the treatment of the third stage, it is observed, that in ordinary cases there is nothing more than a simple state of febrile excitement, which readily yields; but in other cases great danger is to be apprehended from inflammation of the lining membrane of the bowels, requiring energetic treatment.

It is remarked, that the "calomel practice is nearly discontinued," having been superseded by the use of the lancet and opium.

But here we must conclude, having already, we fear, exceeded our limits. We have endeavoured to present a fair and impartial analysis of the author's opinions and facts; our readers may, therefore, in a great measure, themselves judge of the book. In our estimation it contains valuable matter, and is written with much freedom, spirit, and elegance.

* The sudatorium, or vapour bath, is not mentioned. We have seen it highly useful in the stage of collapse, which ushers in many diseases, and it possesses many advantages as compared with the water-bath.

DR. FORBES AND MR. GUTHRIE.

To the Editor of THE LANCET.

SIR,—I send you, in reply to the statement you thought fit to publish in your journal of the 8th March last, the Resolutions of a Special Committee of the Royal Westminster Infirmary for Diseases of the Eye, summoned for the purpose of investigating certain parts of it.

I am, Sir,
Your obedient servant,
G. J. GUTHRIE.

2, Berkeley Street, April 5th, 1828.

ROYAL WESTMINSTER INFIRMARY FOR DISEASES OF THE EYE.

Wednesday, 2d April, 1828.

At an adjourned special meeting held this day, present—

Lord Grantham in the Chair.

Vice Presidents.

George Byng, Esq. M.P.
Sir John Swinburne, bart.
Sir James M'Grigor.
Sir William Franklin.
Archibald Campbell, Esq.

Samuel Reed, Esq. *Treasurer.*

Mr. Skelton	Mr. Prosser
Mr. Stodart	Mr. Courtenay
Mr. Stewart	Dr. Forbes
Mr. James	Mr. Guthrie
Mr. Clarke	Mr. Hughes, *Assist. Sec*

The following paragraph* from THE LANCET of the 8th March, page 834, was submitted to the Committee:

"Thus the hour of visit on Saturday the 26th of May, the day on which the paragraph appeared in THE LANCET, was *ten o'clock*; but Saturday, June 2d, the day on which Mr. Guthrie's letter of reply was published, the hours had been *changed* to half past eleven for Dr. Forbes, and to half past twelve for Mr. Guthrie."

The Committee having called in several witnesses, and examined such papers as could throw light upon the subject, resolved, That the statement, "that a change in the hours of attendance from ten o'clock to half past eleven, took place between the 26th of May and 2d of June, 1827," is false. A change of hours had taken place in January, 1827, which was duly made known by written notices placed in the public waiting room, and by verbal announcement to the pupils and patients, as far as it was practicable.

The following paragraph, page 835 of the same publication, was also submitted to the Committee:—

"This person, who was the *house pupil* on the 26th May, on the morning when the paragraph in THE LANCET appeared, is for the first time denominated *house surgeon* by Mr. Guthrie, in his letter of the same date.—*Note by Dr. F.*"

It appears to the Committee, that this statement is also false. A written certificate granted to Mr. Dunn as far back as 20th March, 1824, signed by Dr. Forbes and Mr. Guthrie, the medical officers of the institution, entitles him *house surgeon*, and the gentleman, who was resident in the house in May 1827, had always been considered and called *house surgeon* by the pupils and others attending the institution.

Copy of the Certificate to Mr. Dunn, referred to in the foregoing resolution:—

Royal Westminster Infirmary for Diseases of the Eye.

We certify, that Mr. Henry Dunn has diligently attended the practice, operations, and lectures of this Institution for six months as the house surgeon.

(Signed) { CHAS. F. FORBES, *Physician.*
GEO. J. GUTHRIE, *Surgeon.*

20th March, 1824.

(Signed) GRANTHAM, *Chairman.*

A true extract.

W. T. HUGHES, *Assist. Sec.*

5th April, 1828.

* The passage here called a paragraph from THE LANCET, is a passage in Dr. Forbes's statement. This is the only remark we deem it necessary to make on Mr. Guthrie's communication.—ED. L.

LITHOTOMY IN THE HORSE.

To the Editor of THE LANCET.

Liverpool, 26 March, 1828.

SIR,—On Thursday last I operated upon a very valuable draught-horse, for stone in the bladder, with complete success.

Not having heard of any operation of the kind succeeding before, I shall feel obliged by your inserting the above in as early a Number of THE LANCET as convenient.

I am, Sir,
Your most obedient Servant,
ROBERT LUCAS, V. S.

Veterinary Surgery,
Great Charlston Street.

[P. S. We should feel obliged if our Correspondent would favour us with the particulars of this operation.—ED. L.]

RIGHTS OF MEDICAL STUDENTS.

TO THE STUDENTS OF THE BOROUGH SCHOOLS.

FELLOW STUDENTS.—When a poor but independent mechanic ventured, in opposition to the will and declared purpose of royalty, to maintain the right of the public to the use of a foot-path about to be closed, he did so, as he said, "because he was unwilling that it should be said, he left the world worse than he found it." I wish to excite in you a similar feeling. Be you unwilling to leave these schools at the end of the session, worse than you found them at its commencement.

You began the session, with the understanding, that having paid the fee for (nominally 12 months) attendance on the surgical practice of the hospitals, you were in fact perpetual pupils, and therefore entitled to continue your visits so long as you found them advantageous. Do not then, suffer the session to close with an unmanly acquiescence in the abolition of that privilege: leave it not for the gentlemen who shall succeed you, to complain, that owing to your folly or indifference, they begin the session of 1828 in a worse condition than you began that of 1827.

It has happened, in all abuses of power, that the most outrageous violation of privilege, the most unjust denials of right, have been founded on the alleged abuse of those rights.—Not by the body enjoying them, but by individuals; witness, as a special illustration of this, the history of all violations of the liberty of the press: the offence, or the supposed offence of *one*, has constantly been the pretext, for such privations as involved the punishment of *the whole body*. Such a punishment, such an undeserved, and therefore unjust punishment, is now about to be inflicted on you, through Mr. Lambert, by his exclusion from the wards of St. Thomas's Hospital.

I am not now going into a justification of Mr. Lambert; he needs not my defence; with him we have nothing to do, excepting as a former student, claiming as one of us our common right. With his conduct—with the character of THE LANCET—with the skill of Mr. Cooper—or the merits of his notorious operation, this subject ought not to be connected; for this is a question of principle, and when principles are at stake, individuals must be forgotten. All that we have to do is to protest loudly against an invasion of our long-enjoyed privileges.

When I speak of *privilege* or *right*, let not any bond-loving Shylock turn to the letter of the document and say, twelve months only is the term paid for, therefore you have no legal right. I would ask, are there not rights, well established rights—demanded by their utility, nay necessity—founded on long usage—and guaranteed by public opinion? Are there not such rights? and are not *they* equally valuable, and equally defensible with any held under parchment and seal? Certainly they are, and just of such a nature is the right in question; so well founded in common sense, in utility, in long usage, and in public opinion, that no reference to the words "during twelve months," can destroy it. And why, after all, do those words stand on the card? they stand there, it is plain, merely as a technicality, in compliance with the forms of the College, which require that term, as the *minimum* of surgical attendance, qualifying for examination.

If our hospitals were private establishments, mere trading speculations, did they owe their existence to the icy calculation of a modern joint-stock company, then indeed might we expect their money-seeking managers thus penuriously to dole out their advantages, and to deny to the purchaser a fragment more of the *commodity* than he had paid for; but the warm benevolence of our ancestors did not conceive their charities in such a spirit, and let it not be in our day, that their noble institutions are perverted, either into "seats of money changers" or, which is more injurious still, into mere cloaks of defence for such tender reputations as are perchance too delicate to bear the wholesome breeze of public opinion.

Do not imagine, my fellow pupils, that Mr. Lambert's exclusion, will only affect himself. It is by decisions on particular cases, that principles are established. Look for a moment at what may result from this decision of the surgeons, if carried into effect. Every pupil's right to attend, it will declare, closes with the first year of his studies; so that during the second year he spends in London, when surgical practice is of most value—the wards are closed against him; if he enter it is as an intruder, or at best he does so only by favour of the surgeon; his admission is a *boon*, an *indulgence*, demanding, of course, his gratitude and *subserviency*. To the feelings of some, indeed, it may perhaps be very pleasant, thus from day to day to be placed in the condition of suppliants; they may very contentedly begin life as the mendicants of the profession, humbly receiving as alms one week, what may be denied them the next; but most young men would, I imagine, scorn such pauperism in science.

Remember, too, that when the right of exclusion is once fairly established, a future surgical triumvirate may be strongly tempted to connect an additional fee with prolonged attendance; the present surgeons are perhaps too honourable to harbour such a thought for a moment,—but, certainly, they are laying a foundation, on which their successors may very easily erect the golden temple of increased fees. Another most serious objection to this law of exclusion, is the unwarrantable power it gives to the surgeons. It places the students, individually and collectively, entirely at their mercy. Each student, for any offence, fancied or real, will be liable, at the will of the surgeon, not merely to be deprived of the advantages of the hospital, but to be disgraced in the eyes of his fellow students and the profession generally, and to be driven to appear as a candidate for public favour under the stigma thus unworthily cast upon him.

But what, it will be asked, are we to do in order to repel this aggression? *At present*, with the hope that the exclusion will not be persisted in, I do not urge any active measure; I am rather anxious to call upon the body of students to THINK and FEEL on the subject as they ought, and not to be led, as I lament to know some are, to justify the exclusion. I entreat them, whatever may be their opinion of Mr. Cooper, not to be ensnared into an abandonment of their own rights; even the honourable gentlemen of Guys, who so deeply sympathise with him are not thereby bound to be traitors to themselves; the step they have taken, whether in

itself right or wrong, is not inconsistent with the most firm resistance to the injustice now sought to be done them.

It will be, I believe, only by the voice of the hundreds of their surrounding pupils, that the surgeons can carry their resolution into effect; and on the other hand, if the pupils are alive to their own interest without such support, if they offer the moral opposition of a strong opinion expressed with moderation, then I believe the resolution will be cancelled, or at least will remain a dead letter.

In conclusion, I beg to disown all party feeling—I have not the least acquaintance either with the Editor of THE LANCET, or with Mr. Lambert, but am solely anxious for the interests of the body of students, to which I am proud to belong.

MORAGER.

April 7, 1828.

ST. THOMAS'S AND GUY'S HOSPITALS.

GUY'S.

CASE OF PARALYSIS OF THE MUSCLES OF THE SHOULDER OCCURRING SUDDENLY, AND WITHOUT ANY EVIDENCE OF CEREBRAL DERANGEMENT.

THE subjoined is a well-marked instance of local palsy, the motory power of the part alone being disturbed, whilst the sentient power continues perfect. Although local palsy is frequently produced by the same causes which lead to general palsy, operating in a less degree, and is rendered manifest by the circumstance of the local symptoms often being the forerunners of a more extended affection, yet there are many cases similar to the one we are about to relate, in which we find a particular part become paralysed, without the slightest evidence of general derangement, the affection being, in the most extended sense of the word, *local*.

Job's Ward, No. 23.—T. B., a stout healthy looking countryman, about twenty-six years of age, was admitted under the care of Mr. Bransby Cooper, on the 12th of March, on account of loss of power in the muscles of the right shoulder.

The man stated, that he was lying in bed at night six weeks ago, when he suddenly awoke, and found his arm cramped, which he attributed to the circumstance of having laid upon it; he threw his arm quickly over his head, in order to relieve himself; but, in the performance of this act, experienced so much pain, that he was led to the belief of having dislocated his shoulder. From this period, he experienced a want of power in the part; there was no numbness either at the shoulder, or down the arm; no pain in the head, or, in fact, any complaint existing, but the loss of power at the shoulder. Under the impression of the bone being dislocated, the man applied to a notorious quack "bone-setter," in the neighbourhood of Wisbeach, who, of course, told him the bone was "*out*," and pretended to reduce it. Subsequently to this, blisters were applied, and various means adopted, but without benefit.

Upon attentively examining him two days after admission, we made the following notes: the shoulder has a flattened appearance; the deltoid muscle, as compared with the opposite, evidently being much wasted; the head of the bone is in its natural situation; pain is experienced on making firm pressure at the fore part of the joint, and also at the back part; passive motion made in any direction, occasions no pain. There appears to be a total loss of power in the deltoid muscle, and in the supra-spinatus; if desired to raise his arm, he instantly carries the scapula upwards; the motion of the latter bone appears to have proportionally increased with the loss of power in the deltoid; the facility with which the scapula is moved on the side of the chest, being remarkably great. The man's general health is very good, and there is perfect sensation in all the parts about the shoulder.

Treatment.—March 13. *Two grains of blue pill, one grain of ipecacuanha*, and *three grains of extract of colocynth*, to be taken every night.

Sulphate of magnesia, one drachm;

Tincture of hop, half a drachm;

Infusion of gentian, one ounce and a half, to be taken twice a day. To be electrified; sparks to be drawn from the shoulder.

25. Ordered a blister, to be dressed with savine cerate.

April 7. The shoulder to be rubbed with the turpentine liniment.*

Upon visiting the patient on the 8th, we found that he had been "presented," as it is termed—that is to say, discharged; the surgeon having informed him, that he "could do nothing more for him." He is precisely in the same condition as when admitted; the two grain doses of blue pill did not occasion ptyalism, nor did the tincture of hop produce any marked effect!

* This is a stimulating liniment, containing mustard, &c., and is in common use at this Hospital.

ST. THOMAS'S HOSPITAL.

CASE IN WHICH A SUDDEN LOSS OF POWER OCCURRED IN THE EXTENSOR AND FLEXOR MUSCLES OF THE FINGERS OF THE LEFT HAND.

As this case, which is at present in Jacob's Ward under treatment, bears a close analogy to the former, we here insert the particulars.

S. Glue, ætat. 37, a gardener, and a healthy looking man, was admitted on the 6th of March, under the care of Mr. Tyrrell, on account of loss of power in the left hand.

He stated on admission, that seven weeks previously he was nursing a child upon his knee, when it slipped, and he hastily endeavoured to save the child with his left arm; he immediately felt pain in the arm, and became conscious of a loss of power. He applied leeches, and made use of various means, but obtained no benefit.

The case is stated in the book as loss of muscular power of the extensors and flexors of the left *hand*; but, upon examination, it appears to be rather a paralysis of the muscles of the fingers, and existing in the most marked degree with the extensors. The motions of the carpus are tolerably distinct; the hand is bent backwards and forwards, according to the will; but apparently flexion is performed with greater facility than extension. The fingers are constantly in a state of semiflexion, and the power of bending them backwards is entirely gone; the power of flexion remains, but to a very limited extent; the fingers can be brought down to the palm of the hand, but he cannot use any force so as to clench. The muscular powers of the thumb, with the exception of extension, are perfect. There is no sense of numbness in the hand or arm, and there is no pain experienced. The man's general health is very good.

The treatment hitherto employed, has consisted in keeping the hand in an extended position upon a splint, applying a large blister to the arm, and subsequently tartar emetic ointment. A report made on the 9th of April states, that no improvement had taken place in the condition of the patient, the arm at this time being covered with a crop of pustules produced by the tartar emetic ointment.

A few months since, there was a female patient, under the care of Mr. Travers, affected with loss of power in the extensor muscles of the legs only. The disease in this instance appeared to be sympathetic, dependent on general derangement of the system: the uterine functions were especially disordered. A cure was effected by general treatment, and as the health gradually improved, the paralytic affection ceased.

TO CORRESPONDENTS.

Communications have been received from Mr. Sheriff—Mr. Thomas—The Editor of La Gazette de Santé—C. M. C.—Mr. Robertson—Mr. R. Lanyon—Hibernicus—Philalethes—An Englishman and University Graduate—S. W. M.—Veritas—A Retired General Practitioner—Mr. Sheldrake—Mr. Edritch—Caballus.

The request of "I myself I" is superfluous, since the thing is already printed.

The proposition of the Editor of "*La Gazette de Santé*" is acceded to.

Dr. Dieffenbach, of Berlin, shall hear from us privately.

In reply to the query of an anonymous Correspondent, respecting the regulations of the English College of Physicians, we have to inform him, that no such alteration as the one he mentions has taken place.

Thanks for the information respecting Ferguson, the Dub we shall probably phlebotomise him.

Does "J. L. F." wish us to attach his name and address to his communication? if so, it shall be published.

We should be glad to be informed of the addresses of "Philalethes," and "Discipulus Æsculapii."

The paper transmitted by "A Medical Assistant," for the signatures of those whom it concerns, is left at our office; and the letter which accompanied it shall be published next week.

Several communications above specified, with others noticed on former occasions, shall be inserted in our next Number.

Want of space has compelled us to postpone our reports of the proceedings of the Medico-Chirurgical, London, and Westminster Medical Societies; and also of cases at St. Bartholomew's Hospital, the letter of a "Veterinary Pupil," &c. &c.